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SATURS
CONTENTS

AUGSTĀKĀ IZGLĪTĪBA
HIGHER EDUCATION

AUGSTĀKĀ IZGLĪTĪBA
HIGHER EDUCATION

SOCIETY. INTEGRATION. EDUCATION
Proceedings of the International Scientific Conference. Volume I, May 25th -26th, 2018. 17-27

EXPLORING ICT EDUCATION AT MASTER LEVEL IN THE CONTEXT OF ADVANCEMENT OF DIGITAL ECOSYSTEM: THE CASE OF KAZAKHSTAN

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Abstract. *In order to achieve the aim of Kazakhstan's progressive development of the digital ecosystem, higher education sector has to harmonize ICT study programmes in accordance with updated professional standards and industry requirements for preparation of specialists. As competencies and skills permanently change, competencies and skills are to be enhanced lifelong. The purpose of the paper is to explore ICT education in the context of advancement of digital ecosystem underpinning empirical analysis of ICT education at master level in Kazakhstan and elaboration of a new research question. The method of the study is exploratory case study. The case study was carried out in December 2017. The findings of the empirical study reveal that a combination of Data Science and Information Security emerge in the context of the advancement of digital ecosystem in Kazakhstan. The new research question has been formulated: What are core courses of the hybrid study programme that combines Data Science and Information Security at master level? Directions of further research are proposed.*
Keywords: *ICT higher education, master level, digitization, digitalization, ecosystem, context, hybrid knowledge and skills.*

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Introduction

As the cost of data collection, storage and processing continues to decline dramatically and computing power increases, social and economic activities are increasingly migrating to the Internet (OECD, 2017). Technologies, smart applications and other innovations in the digital economy can improve services and help address policy challenges in a wide range of areas, including health, agriculture, public governance, tax, transport, education, and the environment, among others (OECD, 2017).

In order to improve the quality of life of the population and competitiveness of Kazakhstan's economy, the President of Kazakhstan addressed "Third modernization of Kazakhstan: Global Competitiveness" to his Nation on the 31st January 2017. The address given by the President of Kazakhstan served as the basis for the elaboration of the Government Programme entitled *Digital Kazakhstan* (Digital Kazakhstan, 2017). The Government Program "Digital Kazakhstan" is scheduled for two phases: First phase: 2016-2019, and Second phase: 2020-2025. The goal of the Government Programme *Digital Kazakhstan* is the progressive development of the digital ecosystem in Kazakhstan. The Government Programme *Digital Kazakhstan* specifically aims to facilitate Kazakhstan's digital modernisation by focusing on four key priorities:

- creating a high-speed and secure digital infrastructure;
- digital transformation within all appropriate sectors of the economy;
- government proactivity in digital affairs; and
- the development of competencies and skills to permit a creative and digital society.

The Government Programme *Digital Kazakhstan* highlights that more professions and working positions emerge that require «hybrid knowledge and skills», namely a combination of knowledge and skills in ICT and another professional domain that focuses on automatisation of professional activity (Digital Kazakhstan, 2017; p. 14).

Realisation of the Government Programme *Digital Kazakhstan* shifts the paradigm in higher education (Digital Kazakhstan, 2017; p. 44)

- from preparation of students as specialist
- to the promotion of students to develop their professional careers.

The Government Programme *Digital Kazakhstan* implies the establishment of the close connections between the system of education and employers (Digital Kazakhstan, 2017; p. 44). On the one hand, competence centres as part of universities are to be initiated, on the other hand, ICT departments as part of enterprises are to be organised in order to provide students with modern labs for practical work (Digital Kazakhstan, 2017; p. 44).

For Kazakhstan's progressive development of the digital ecosystem, higher education sector has to harmonize ICT study programmes in accordance with updated professional standards and industry requirements for preparation of specialists (Digital Kazakhstan, 2017; p. 44). As competencies and skills permanently change, competencies and skills are to be enhanced lifelong (Digital Kazakhstan, 2017; p. 45).

The purpose of the paper is to explore ICT education in the context of advancement of digital ecosystem underpinning empirical analysis of ICT education at master level in Kazakhstan and elaboration of a new research question.

The method of the study is exploratory case study. The empirical study was carried out in December 2017. Seven respondents took part in the semi-structured interviews.

Conceptual framework

The present research is based on such concepts as *conceptual framework, digitization, digitalization, digital ecosystem, ICT education, study programme at master level, context* and *hybrid*.

A framework means the specific viewpoint (Ahrens & Zaščerinska, 2014) on a phenomenon. In research, frameworks are differentiated into theoretical and conceptual as illustrated in Figure 1.

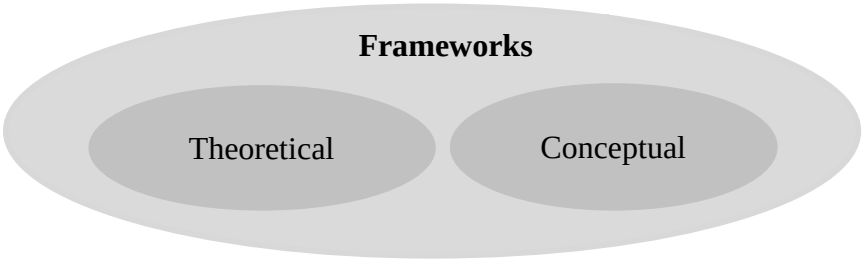

Figure 1. **Types of frameworks in research**

A theoretical framework includes the combination of concepts together with their definitions as well as existing theory. In turn, as a concept is defined to be a verbal abstraction drawn from observation of a number of specific cases (Watt & van den Berg, 2002), a conceptual framework means the unity of concepts that are used for a particular study (Ahrens & Zaščerinska, 2014).

Digitization refers to "the action or process of digitizing; the conversion of analogue data (esp. in later use images, video, and text) into digital form" (Brennen & Kreiss, 2016). Digitalization, by contrast, refers to "the adoption or increase in use of digital or computer technology by an organization, industry,

country, etc" (Brennen & Kreiss, 2016). By digital ecosystem, an interdependent group of actors (enterprises, people, things) sharing standardized digital platforms to achieve a mutually beneficial purpose (Gartner Inc., 2017) is meant. By ICT education, a sector of education devoted to Information and Communications Technologies (ICT) as a diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information (Blurton, 1999) is identified.

Study programme at master level means that the programme refers to higher education of Level 7 or second cycle (M. A.) within the eight-scale European Qualifications Framework (Commission of the European Communities, 2006, p. 19). The eight-scale European Qualifications Framework reflects stages in a lifelong learning process (Commission of the European Communities, 2006: p. 19). Outcomes of Level 7 in the European Qualifications Framework (Commission of the European Communities, 2006: p. 19) include

- knowledge as highly specialized, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking; critical awareness of knowledge issues in a field and at the interface between different fields,
- skills as specialized problem-solving required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields,
- competence to manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches; take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams.

Context means certain relationships that exist simultaneously and are important for an individual or a group (Beļickis, et al., 2000).

Hybrid means a combination of phenomena's elements. It should be noted that *hybrid, mixed, integrative* and *blended* are often used synonymously. For example, blended educational methods include

- traditional educational methods such as lecture, explanation, exercise and examination as well as
- modern educational methods such as use of modern technologies in the educational process.

Analysis of the terms *hybrid*, *mixed*, *integrative* and *blended* allow concluding that a combination of phenomena's elements includes two contrasting modes, namely traditional and modern. Hence, such a phenomenon obtains or exhibits two contrasting modes or forms. A phenomenon that obtains or exhibits two contrasting modes or forms is identified as bi-modal phenomenon (Ahrens & Zaščerinska, 2014). Consequently, the term *bi-modal* as well as *hybrid, mixed, integrative* and *blended* could be used synonymously.

Empirical Study

The present part of the contribution demonstrates the design of the empirical study, survey results and findings of the empirical study.

The design of the present empirical research comprises the purpose and question, sample and methodology of the present empirical study.

The research question is as follows: What is stakeholders' opinion on ICT education in Kazakhstan?

The purpose of the empirical study is to analyze stakeholders' opinion on ICT education in Kazakhstan.

The empirical study was carried out in December 2017. The present empirical study involved seven respondents. In order to save the information of the present research confidential, the respondents' names and surnames were coded as R1 (Respondent 1), R2 (Respondent 2), R3 (Respondent 3), R4 (Respondent 4), R5 (Respondent 5), R6 (Respondent 6) and R7 (Respondent 7):

- Respondent 1 belonged to the Committee on Statistics of the Ministry of Education and Science (MES) of the Republic of Kazakhstan (RK),
- Respondent 2 – the rating agency Career Cast (USA),
- Respondent 3 – management staff member of International Information Technology University (IITU),
- Respondent 4 – a bank in Kazakhstan,
- Respondent 5 – a state agency serving electronic government,
- Respondent 6 – the Marketing Department in one of the biggest malls of Almaty - 'Dostyk Plaza', and
- Respondent 7 – academic staff member of International Information Technology University (IITU).

All 7 respondents obtained different degrees in different scientitifc fields. Working experience of the respondents was different, too. The respondents represented different professional cultures such as banking, education, business, etc. As the respondents with different cultural backgrounds and diverse educational approaches were chosen, the sample was multicultural. Thus, the group (age, field of study and work, mother tongue, etc.) is heterogeneous.

The interpretive paradigm was used in the empirical study. The interpretive paradigm aims to understand other cultures, from the inside through the use of ethnographic methods such as informal interviewing and participant observation, etc (Taylor & Medina, 2013). Interpretative paradigm is characterized by the researchers' practical interest in the research question (Cohen et al., 2003). Researcher is the interpreter.

The case study research has been applied as "case studies […] are generalizable to theoretical propositions and not to populations or universes. In doing a case study, your goal will be to generalize theories (analytical

generalization) and not to enumerate frequencies (statistical generalization)" (Yin, 2003: p. 10). Case study research is a qualitative research design (Kohlbacher, 2005). The exploratory type of the case study research has been applied (Zainal, 2007) in the present empirical study as case studies have an important function in generating new research questions, hypotheses and building theory (Kohlbacher, 2005). Exploratory case studies set to explore any phenomenon in the data which serves as a point of interest to the researcher (Zainal, 2007). The exploratory methodology of the empirical study proceeds from exploration in Phase 1 through analysis in Phase 2 to hypothesis/research question development in Phase 3 (Ahrens, Bassus, & Zaščerinska, 2013: p. 104) as shown in Figure 2.

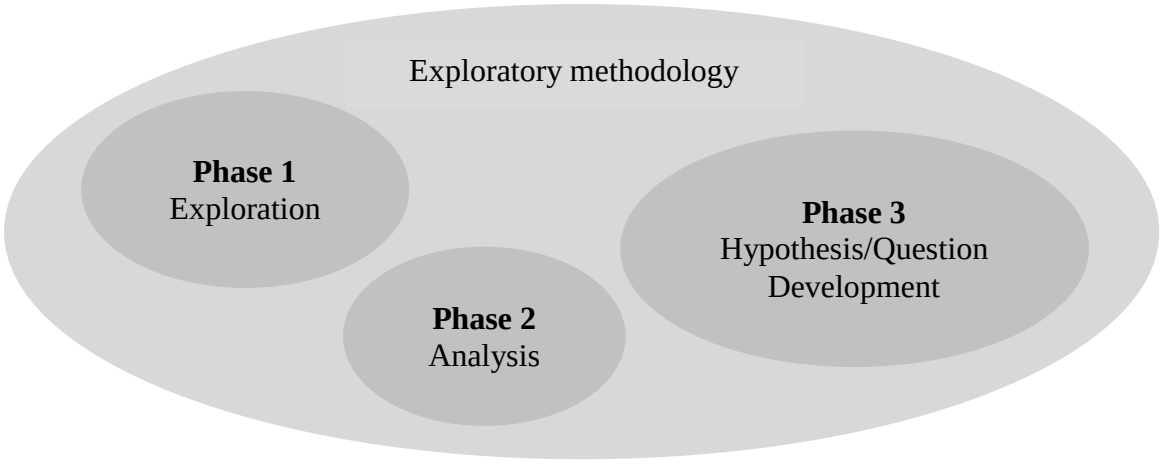

Figure 2. **Three phases of exploratory methodology**

The qualitatively oriented empirical study allows the construction of only few cases (Mayring, 2004). Moreover, the cases themselves are not of interest, only the conclusions and transfers we can draw from these respondents (Flyvbjerg, 2006). Selecting the cases for the case study comprises use of information-oriented sampling, as opposed to random sampling (Flyvbjerg, 2006). This is because an average case is often not the richest in information. In addition, it is often more important to clarify the deeper causes behind a given problem and its consequences than to describe the symptoms of the problem and how frequently they occur (Flyvbjerg, 2006). Random samples emphasizing representativeness will seldom be able to produce this kind of insight; it is more appropriate to select some few cases chosen for their validity.

Semi-structured interviews were used as the researchers had obtained the initial knowledge on the research field (Kroplijs & Raščevka, 2004). The semi-structured interviews included the following question: What is your opinion on ICT education in Kazakhstan?

Respondent 1 reveals that among the graduates of ICT specialties, the least amount falls on the study programme "System of Information Security" (SIS), total: 417 people in 2013-2015. In the period 2013-2015 only 180 grants were awarded at the bachelor's degree on SIS in Kazakhstan, 9 at MA and 4 PhD degrees. The number of allocated grants for the number of SIS students is very small. Analysts pointed the deficit of information security specialists in Kazakhstan that contradicts with the Address "Third modernization of Kazakhstan: Global Competitiveness" to the Nation of the President of Kazakhstan on 31 January 2017. In the Address the Head of State indicated the importance of active introduction of digital technologies for the development of the country's economy and referring to the message of the fight against cybercrime, commissioned the creation of the "Cybershield of Kazakhstan". It proves the urgent necessity of specialists in Information Security.

According to the analysis of Respondent 2, programmers, web developers and information security specialists appear in the ranking of the most popular specialities for 2017-2024, which leads to the possibility of increasing the training of specialists in "System of Information Security" (SIS).

Respondent 3 highlighted that, in International Information Technology University (IITU), the number of applicants for the "System of Information Security" (SIS) is growing every year. In 2015, 13 students were enrolled, in 2016 - 67, in 2017 - 83 students, which indicates the relevance and popularity of this area of study not only in IITU, but in the Republic of Kazakhstan.

Respondent 4 emphasized that data scientists are a new breed of analytical data expert who have the technical skills to solve complex problems – and the curiosity to explore what problems need to be solved. They are partly mathematician, partly computer scientist and partly trend-spotter. As they straddle both the business and IT worlds, they are highly sought. According to Respondent 4, the poll performed by KDnuggets website shows that the most popular areas of data science application in 2016 are CRM/Consumer analytics - 16.3 %, Finance - 15.0 %, Banking - 13.4 %, Advertising - 12.0 %, Science - 12.0 %, Healthcare - 12.0 %. In particular, further applications seem very attracting: Internet Search, Digital Advertisements (Targeted Advertising and re-targeting), Image Recognition, Speech Recognition, Gaming, Price Comparison Websites, Airline Route Planning, Fraud and Risk Detection, Delivery logistics. According to the information from recruiting companies in the region of Commonwealth of Independent States (CIS) (Russia, Ukraine, Belarus, and Kazakhstan) currently there are ~33 business analysts and ~11 data scientists job positions in Kazakhstan.

Respondent 5 outlined that like many other developing countries, Kazakhstan is heading towards the technologically developed electronic government. Thousands of services are provided to the citizens every day. The

egov.kz is a huge source of data which holds tons of useful information to be processed. The list of the sources may be increased considerably, involving financial, retail, mineral resources production and mining, social networks and media sectors.

Respondent 6 considers that there are few universities that include courses related to Data Science in their curricula (e.g. Machine learning, Statistics, noSQL DB, Data visualization, Data Mining, etc.). One of the leading banks of Kazakhstan – Kaspi Bank has launched the study program 'Kaspi Lab'. The program aims at training highly-qualified specialists in Data Science capable of solving practical problems in financial, search engine optimization (SEO) and fast-moving consumer goods (FMCG) sectors. Respondent 6 states that the application of Data Science technologies allows the department to predict the trends in customers' demands and tastes, consequently increasing commodities turnover and customers flow. Currently, the banking sector is one of the most active consumers of Data Science in Kazakhstan. A big trend of the recent few years is digital banking. Such banks as Astana Bank and Altyn Bank present themselves as digital banks with minimum services provided to the customers in person, and a high number of services provided online. Respondent 6 disclosed that according to Bruce Harpham British Petroleum, the U.K.-based energy leader established a Center for High-Performance Computing in Houston, Texas, where researchers apply data analytics to production improvement. Oil and gas companies are the key players in the economics of Kazakhstan, forming around 25 % of the revenue of the State budget of the Republic of Kazakhstan. Acknowledging that oil prices are very unstable, the producers should consider the reduction of costs in all the phases, i.e. exploration, drilling, production. This is where Data Science might become a valuable tool for achieving these goals.

Respondent 7 reveals that International Information Technology University (IITU) experiences a significant deficit of teachers as only one university trains MA students in SIS in English. A research on curriculums of various well-known education platforms such as edX, Coursera and DataCamp shows that only half of the main courses required for data scientists are in the study program of International Information Technology University (IITU). Thus, training and retraining of IT specialists in the direction of IT security is needed. At the same time increase in the number of teaching staff with a degree requires to open postgraduate education (magistracy and doctoral) in this speciality, to enhance the content of education in the form of specialized courses on the main trajectories of studies in the field of Information Security and Data Science, to develop the new skills and competencies. Respondent 7 is sure that ICT education at master level will contribute to the development of the direction "Digital Kazakhstan", which, as the President of Kazakhstan emphasized, is necessary to increase the competitiveness of enterprises and the country as a whole, and to improve the

quality of life of the population.

Summarizing content analysis (Mayring, 2004) of the data reveals that there is an urgent need in ICT specialists in Kazakhstan. Enterprises and industry require specialists with "hybrid knowledge and skills". Such a combination as Information Security and Data Science is on high demand in most enterprises and industry. Universities has to focus on ICT education at master level in order to increase the number of teaching staff with a scientific degree for ICT education quality assurance.

Conclusions

The theoretical findings of the present research allow drawing the conclusions that the terms *hybrid*, *mixed*, *integrative*, *blended* and *bi-modal* are synonymous.

The empirical findings of the research allow concluding that a hybrid study programme is relevant to the local context of the advancement of digital ecosystem in Kazakhstan in terms of educational policy and curriculum innovation. The findings of the study reveal that Data Science and Information Security emerge in the context of the advancement of digital ecosystem in Kazakhstan. Hence, a study programme as a combination of Data Science and Information Security is of great importance in the context of the advancement of digital ecosystem. A hybrid study programme that combines Data Science and Information Security at master level facilitates the increase in the number of teaching staff with a scientific degree for ICT education quality assurance. A hybrid study programme is also a combination of traditional studies and on-line, distance and blended studies.

The following new research question has been formulated: What are core courses of the hybrid study programme that combines Data Science and Information Security at master level?

Validity and reliability of the research results have been provided by involving other researchers into several stages of the conducted research. External validity has been revealed by international co-operation as following:

- the research preparation has included individual consultations given by other researchers,
- the present contribution has been worked out in co-operation with international colleagues and assessed by international colleagues, and
- the research has been partly presented at international conferences.

The present research has *limitations*. The inter-connections between *conceptual framework, digitization, digitalization, digital ecosystem, ICT education, study programmes at master level, context* and *hybrid* have been set.

Another limitation is the empirical study based on one case only, namely Kazakhstan. Therein, the results of the study cannot be representative for the whole area. Nevertheless, the results of the research, namely the extension of the row of the synonymous terms such as *hybrid, mixed, integrative, blended* and *bi-modal*, may be used as a basis of analysis of study programmes. If the results of other cases had been available for analysis, different results could have been attained. There is a possibility to continue the study.

Further research tends to focus on designing a hybrid study programme that combines Data Science and Information Security at master level. Modelling a favourable hybrid educational environment, namely traditional studies and on-line, distance and blended studies within a hybrid study programme that combines Data Science and Information Security at master level, is proposed. ICT students' opinion on hybrid studies has to be investigated. Empirical studies on ICT education in Kazakhstan in other institutions are to be implemented. Another direction of further investigation is considered as evaluation of efficiency of a hybrid study programme. And a comparative research of different countries could be carried out, too.

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MANAGEMENT OF COMPETENCE DEVELOPMENT OF THE HIGHER-EDUCATION TEACHING PERSONNEL

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Abstract. *The urgency of the work is determined by the need to develop new approaches to the assessment process and to increase the level of competence of the teaching staff of the institution, which is the most important factor of its competitiveness.*
The object of the study is the management system of the teaching staff of the higher education institution.
The subject of the study are the models and methods of managing the level of competence of the faculty.
Research objective is to increase the level of competence of the higher-education teaching personnel.
The methods of system analysis, mathematical programming, graph theory are used in the paper.
Keywords: *assessment, competence, higher-education teaching personnel, management.*

Introduction

Currently, higher education institutions (institutions of higher learning) are under conditions of serious changes not only of the external, but also of the internal environment. In the external environment, there are increasing demands on the quality of education on the part of the state, applicants and employers, aggravation of competition among universities for ranking in the rankings and applicants with high results of the Unified State Exam (USE). At the same time, the opportunities for applicants (including foreign ones) to expand when choosing an educational institution are being expanded, economic conditions for the activities of higher education institutions are changing (universities are given the right to freely exercise entrepreneurial and other income-generating activities). On the other hand, the consolidation of universities, the emergence of supporting universities poses the task of improving the organizational structure of

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educational institutions, the formation of new elements of a corporate culture aimed at creating an effective system of reproduction and development of human resources.

All this raises the problem of finding new sources of increasing the competitiveness of higher education institutions, the most important factor of which is the quality of the educational services provided. As is rightly noted in a number of documents of international organizations, legislative and regulatory acts on education, the most important condition for improving the quality of education is the competence of the teaching staff. At the same time, a number of studies (Barkalov et al., 2010; Nasonova et al., 2017; Tatur, 2009) made it possible to identify certain problems on the part of the higher-teaching staff in improving the quality of education: the lack of unified models, rules and methods for assessing the level of competence of the teaching staff, which impedes the realization open personnel policy and attracting qualified personnel from outside; Inadequate mastering by teachers of methodologies recognized at the world level; low motivation of the higher-teaching staff to participate in the processes of changes and optimization of the activities of educational institutions.

As practice shows, the structural divisions on personnel management that exist in most HEIs usually carry out legal regulation, accounting and staff statistics. The solution of the above mentioned problems requires a new approach to the construction of management systems by the teaching staff of educational institutions, which must also perform the functions of evaluation, motivation and compulsory development of the faculty.

The purpose of this work is to develop a method for a comprehensive assessment of the level of competence of the teaching staff of an educational institution of higher education. Correctly planned, scientifically based and based on methods and mechanisms of management, the personnel assessment system will not only make it more efficient to assess and select teaching staff in the conditions of introducing professional standards at the present time, but also to increase the motivation of teachers to develop existing and acquire new ones competencies, and also to design a trajectory of development of competence of both individual teachers and structural divisions as a whole.

Management system for the development of the competence of the faculty

Competences are stable characteristics of the human personality, predetermining the behavior of a person in a variety of situations and work tasks. At present, a multidimensional (holistic) approach to competence is becoming widespread, which offers more opportunities for integrating business requirements, human resource management technologies and the educational

process. The competency model is the basis for making any personnel decisions regarding hiring, evaluation, upgrading, moving, stimulating and motivating the personnel of the organization.

In this paper, the definition of the competence of the Russian scientist A.V. Chutorskoy (Trishina & Chutorskoy, 2007), according to which, "... competence is the possession, possession of the subject by the relevant competence, including his personal attitude to it and the subject of the activity. Competence is a personal quality (a totality of qualities) that has already taken place and a minimum necessary experience in a given field." It should be noted that the general definition of the teacher's competence will not differ from the generally accepted one, but will differ in the set of competencies characterizing the level of the teacher and the characteristics of his personality. In Fig. 1 represents the structural model of the competence of the teacher of an educational institution of higher education and its evaluation, developed at the Voronezh State Technical University.

Comprehensive assessment of the level of competence of the organization. Consider an organization consisting of *n* units. For definiteness, let it be a university consisting of *n* institutes (faculties), where each employee (teacher) of the university has a certain level of competence. Assume that the level of competence is assessed on a three-point scale: 3 - high level, 2 - elevated level, 1 - normal level.

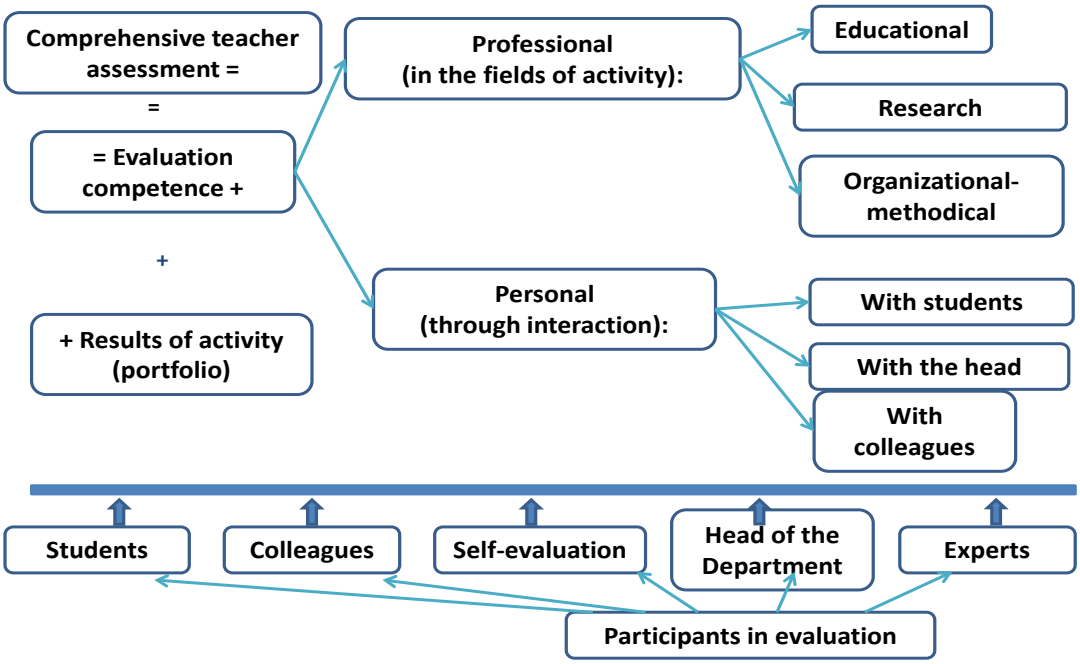

Figure 1. **Structural model of the teacher's competence and assessment**

The level of competence of the Institute's personnel will be assessed as follows. Let n –number of higher teaching staff; n_1 – number of higher teaching staff, having a normal level of competence; n_2 – number of higher teaching staff, having an increased level of competence; n_3 – number of higher teaching staff, having a high level of competence. We denote by: $Y = n_1 + 2n_2 + 3n_3$ - amount of competence levels higher teaching staff's institute. We introduce the boundary values:

$$A_0 = q_0 n,\ A_1 = q_1 n,\ \ A_2 = q_2 n,\ \text{where}\ q_1 < q_2 < 1;$$

Respectively, if Y ≥A2, then this means that the institution has a high level of competence; if A1 ≤ Y<A2 - increased level of competence of the higher teaching staff, if A0 ≤ Y<A1 - normal level of competence, if Y<A0 - low level of competence and organizational measures are required.

To assess the level of competence of PPP as a whole, the matrix convolution apparatus is applicable. We define the dichotomous structure (binary tree) of the pairwise aggregation of the competence levels of higher teaching staff's institutions. There is an example of such a structure is shown for the case of the four institutions in Fig. 2.

First, an integral assessment of the level of competence of institutes 1 and 2, as well as 3 and 4 is determined. Then a comprehensive assessment of the level of competence of the combined institutes I and II is determined. It should be noted that a binary tree can be any.

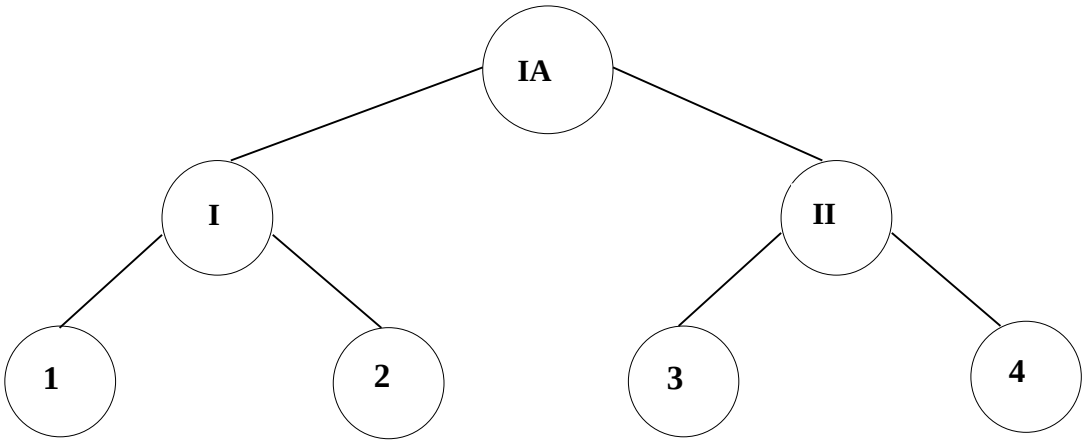

Figure 2. **Binary tree of pairwise aggregation of competence levels**

The definition of aggregated estimates is made on the basis of matrices 3×3. There is an example of such an aggregation matrix for estimating institutions 1 and 2 is shown in Fig. 3.

3	2	3	3
2	1	2	3
1	1	2	2
2 / 1	1	2	3

Figure 3. **Matrix of aggregation of competency assessments**

The choice of matrices is determined by the priorities of institutions. Thus, from the matrix in Fig. 2.2 it can be seen that the Institute 1 has a certain priority before the institute 2. Indeed, in the estimation of the second institute and the second one, the integral score is 2, and in the reverse picture (the score of 1 from the first institution and the estimate of 2 from the second) the integral estimate is 1. Having method of assessing the level of competence of the institution as a whole, it is possible to solve the problem of increasing this assessment.

Strategies to improve the level of staff competence. There are various strategies to increase the level of competence of the organization's staff. Consider three of them. The first is a training strategy in which the organization spends certain funds to increase the level of competence of employees in a particular field of activity. The second is a hiring and firing strategy in which an organization employs an employee with a high level of competence in a particular field of activity, dismissing an appropriate employee who does not have a high level of competence. And the third is a strategy of reassignment, in which the organization swaps employees. Consider these strategies.

Consider the *training strategy*, which consists in identifying the set of employees whose level of competence is desirable to be improved, and in identifying those areas in which it is desirable to increase the level of competence of their employees. Assume that the structure of the distribution of workloads does not change with the growth of the level of competence of employees. In this case, increasing the level of competence of the employee in the field of work assigned to him, will increase the level of performance of these works. For the formal statement of the problem, we denote K_{ij} - costs for training an employee *j* (to increase the level of his competence) in the field of work ot the *i*-th type. Obviously, this will increase the amount of work performed by employees with a high level of competence by the amount x_{ij}. We denote by $y_{ij} = 1$, if associate *i*, to whom works are assigned of the *j*-th type in volume x_{ij}, aims at learning, $y_{ij} = 0$ otherwise; $T(x)$ - set of pairs (i, j), such that $x_{ij} > 0$ and employee *j* has a normal level of competence in the field of activity *j*.

A task. Identify y_{ij}, $(i, j) \in T(x)$, maximizing $\Delta(x, y) = \sum_{(i,j)\in T(x)} x_{ij} y_{ij}$ under restriction $\sum_{(i,j)\in T(x)} K_{ij} y_{ij} \le H$, where H – funds allocated for training.

This is a classical knapsack problem, effectively solved for integral parameter values by the method of dichotomous programming. We note that the results of the investigations carried out (Burkov et al., 2009; Burkova, 2009; Nasonova et al., 2017) suggested a simple heuristic rule: when solving the problem of determining the optimal flow, one should consider the increase in flows along arcs in the order of increasing value h_{ij}, that is, the costs of training. We note, however, that the task of determining the optimal training strategy, taking into account the possibility of redistribution of the amount of work, is waiting for its solution.

Let's pass to the analysis of *strategy of hiring-dismissal*, which feature is growth of intensity in collective, connected with dismissals. Realizing this, the head limits the operation of this strategy. We denote by d_{ij} increase in the level of tension in the team, caused by the dismissal of an employee j. We denote below $z_j = 1$, if an employee j resigns, and instead of him a specialist from outside, $z_j = 0$ otherwise, r_j – increase in the amount of work performed with a high level of competence in hiring an external specialist instead of an employee j. Finally, we denote by L – a lot of employees who have jobs performed with a level of competence below the high.

A task. Identify z_j, $j \in L$, maximizing $\sum_{j\in L} r_j z_j$ under restriction $\sum_{j\in L} z_j d_j \le D$, where D – an acceptable level of tension from the point of view of the manager.

If the hired specialist goes to a higher salary, then one more restriction on the payment fund should be taken into account.

Consider the *reassignment strategy*. The need for this strategy is due to the fact that over time the levels of competence of employees vary. Thus, young employees actively increase their level of competence, and older employees, on the contrary, can reduce their level of competence, as they are more difficult to keep up with changes and learning becomes more difficult. If you do not apply training strategies or hiring-firing, you can try to apply the strategy of reassigning employees to posts. Undoubtedly, the reassignment strategy raises the level of tension in the team, as well as the hiring-firing strategy. Therefore, the manager should limit the number of reassignment operations.

Let's explain the strategy of reassignment using a simple example. There are four jobs (posts) and four employees (Fig. 4). Employee *i* holds the position of *i* with experience x_i (indicated at the corresponding vertices). It is assumed that all employees can hold any position. Dotted pairs (i, j), in which the employee *j* has a high level of competence.

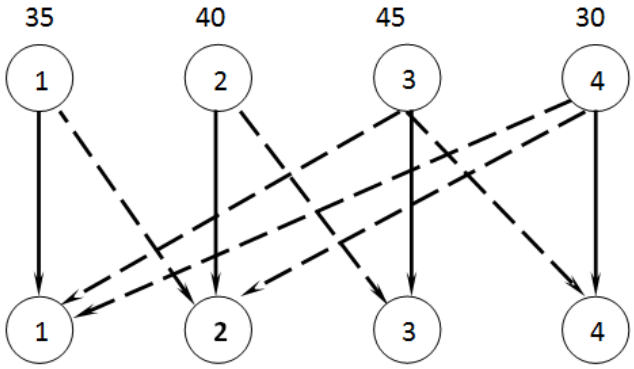

Figure 4. **Illustration of the reassignment strategy**

Note that in the initial distribution of work, the level of competence is 0.

There are 6 elementary reassignments. Consider these:

1. Reassignment (1, 2). Level of competence 35;
2. Reassignment (1, 3). Level of competence 45;
3. Reassignment (1, 4). Level of competence 30;
4. Reassignment (2, 3). Level of competence 40;
5. Reassignment (2, 4). Level of competence 30;
6. Reassignment (3, 4). Level of competence 45.

Define *m*- vertex graph. Tops *i, j of* graph edge if possible reassignment of relevant staff. Edge length l_{ij} is equal to an increase in the amount of work performed by employees with a high level of competence. This graph is called the reassignment graph.

Suppose the manager considers admissible *k* of elementary reassignments. The problem reduces to determining *k* edges that do not have common vertices, so that the sum of the lengths is maximal. A set of edges that do not have common vertices is called a match.

A task. Identify a matching of *k* edges with a maximum sum of lengths.

For a small number *k* this problem can be solved by a simple listing. However, a more targeted approach is more efficient, to which, in particular, the branch and boundary method applies. Let's illustrate the method using the example (Fig. 5.).

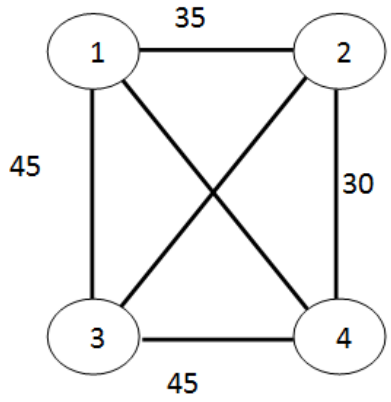

Figure 5. **Graph of reassignments**

Consider the following algorithm.

1 step. Take the edge with the maximum length - this is an edge (4, 3). We divide the set of all solutions into two subsets. In the first subset, the edge (4, 3) enters the solution, and in the second - does not enter.

Evaluation of the first subset

Because the k = 2, then we add one edge of maximal length from the remaining edges that have no common vertices with edges (4, 3) to the edge (4, 3), this edge (1, 2). The estimate of this subset is 45+35 = 80.

Evaluation of the second subset

We take two edges with maximum lengths, not taking into account the edge (4, 3). The score is 45 + 40 = 85. Choose the second subset.

2 step. We take the following edge of maximum length. This is an edge (1, 3). We divide the subset in which the edge (4, 3) does not enter into the solution into two. In the first edge (1, 3) enters the solution, but in the second one does not enter. The evaluation of the first subset is 45 + 30 = 75. The evaluation of the second subset is 40 + 3 = 70. We choose the subset (3, 4), that is, the solution includes the edge (3, 4) and the edge (1, 2) with the increase in the level of competence 80.

This solution is optimal. The branch tree is shown in Fig. 6.

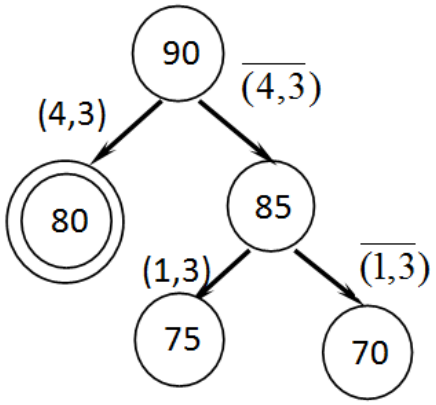

Figure 6. **Example of a branch tree**

The described algorithm can be generalized to the case of any k and any graph of assignments.

The management system for the development of the competence of the teaching staff. Creation of a competence management system for personnel of any organization, including an educational institution, begins with the development of competency models that represent the standards of professional and business qualities that correspond to posts or groups of posts. In practice, competence is usually described as the ability to solve work tasks, and competence - as the standards of behavior that provide this ability. In order to be competent, the employee must demonstrate certain behaviors that enable him to be competent. The model of competencies is the main tool for making managerial decisions regarding the personnel of the organization.

The structure of the personnel management system based on the competency approach was developed at the Voronezh State Technical University (Nasonova et al., 2017).

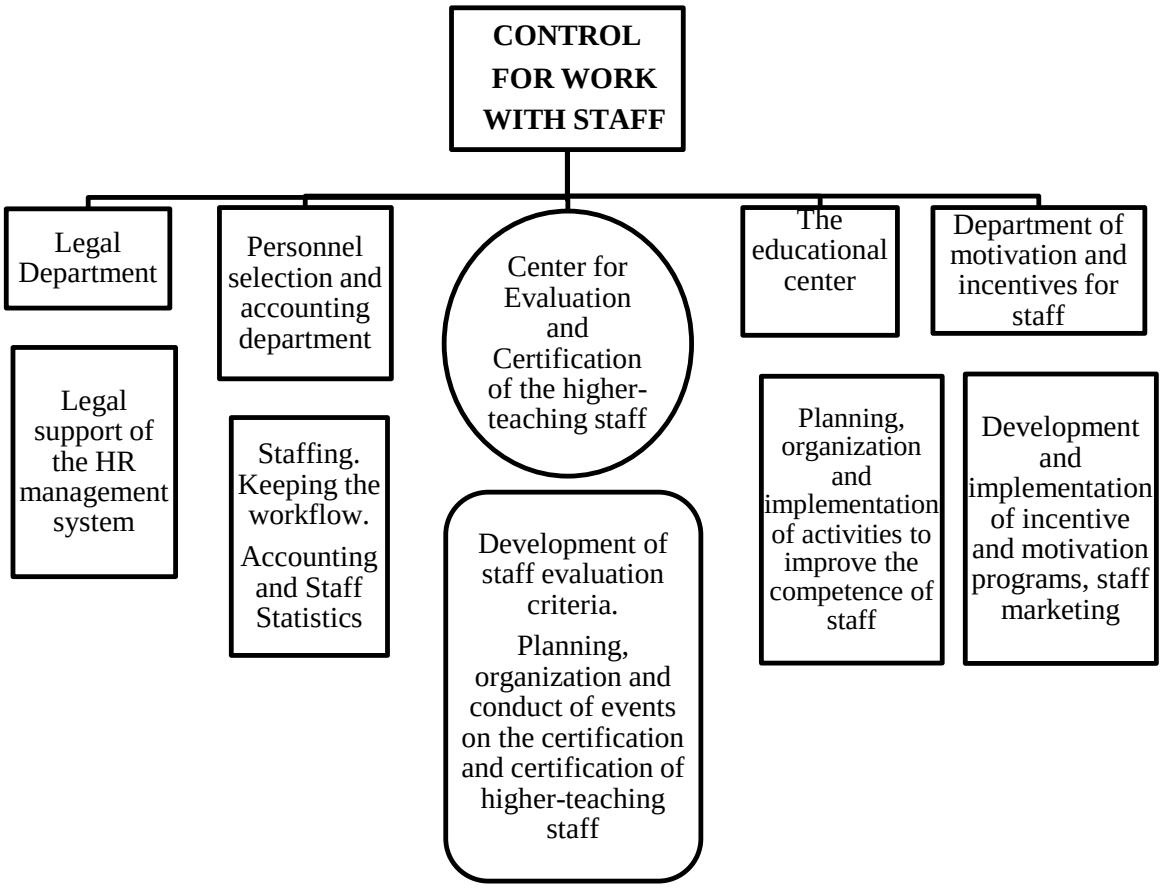

Figure 7. **Structure of the personnel management system**

The key division of this system is the Center for Evaluation and Certification of the higher-teaching staff, as it is the evaluation results that allow making

objective decisions on the selection and hiring of personnel; Identify gaps in the knowledge and skills of staff and develop training programs; to determine measures to improve the technology of activities and the distribution of work; make adjustments to the system of motivation and stimulation of personnel; to develop career plans for employees and to form a personnel reserve. Increasing the level of competence of the faculty provides the training center.

Conclusions. The solution of the problem of increasing the competitiveness of any educational institution includes the task of developing the competence of the teaching staff, which can be solved on the basis of an integrated approach to the management system of the faculty. Such a system must necessarily implement interrelated functions of evaluation, development, motivation and stimulation of the teaching staff.

The result of the work is the method of comprehensive assessment of the competence level of the teaching staff of the higher education institution, taking into account the priority of the units in the integrated assessment system. Also, to solve the task of forming a program to increase the level of competence of the faculty, a modification of the method of branches and boundaries is proposed, the distinguishing feature of which is the inclusion in the branching scheme of the procedure for improving the lower estimate obtained on the basis of the network programming method. As shown by computational experiments, such a modification reduces the number of branches by an order of magnitude.

The practical importance of the work lies in the fact that its results can be applied in developing methods for increasing the level of competence of the teaching staff of the institution.

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WHY DO YOU WANT ME TO LEARN CONNECTIVELY BUT TEST ME INDIVIDUALLY? SOCIALLY EMBEDDED LEARNING AT THE UNIVERSITY

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Abstract. *Connectivism concept introduced by George Siemens seems to be accurate when considering current-learning processes in higher education. The author emphasises the role of socially embedded learning that can take place out of human bodies, in devices. The main aim of this work was to analyse students' and academic teacher's experiences related to cooperating through a network and creating mind maps as a result of learning in the frame of the conducted course at the University. The data was collected during the course through Mentimeter tool, which enabled the author to learn students' opinions, reflections and associations related to the process of working on electronic mind maps. Students were also asked to write reflective essays where they described their experiences associated to the mind map that were significant from the perspective of learning at the University. The results of the analysis were presented below.*
Keywords: *Connectivism, higher education, mind maps, networking, social media.*

Introduction

The idea of mind mapping originates from brain studies that were in the focus of interest of many scientists. For example Roger Sperry, who received a Nobel Prize in 1981 for his empirical research on cerebral hemisphere, argued that the left brain is responsible for logical and analytical thinking (words, sets and linearity) while the right brain controls imagination, creative thinking, colours, and emotions (Sperry, 1975). Nowadays some scientists contradict these earlier studies and claim that, for instance, semantic representations may not be lateralized only in the left hemisphere (Huth et al., 2016). Tony Buzan emphasised that when people prepare a mind map they use both: left and right brain, and as a result, the process of noting and remembering is more effective. According to him, the access to man's memory is enabled by key words and key images that activate all associative contexts (Buzan, 1984). A mind map would be then something like a thinking tool that reflects what is in an individual's head.

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Unfortunately, as a pupil and later as a university student I have never had a chance to prepare a mind map during my formal education. My daily observations, during work at the University, allowed me to assume that contemporary young adults (Strelau, 2003) do not know the idea of mind mapping either. At least, these university students who I meet with at the Faculty of Social Sciences. As a young academic teacher, I can definitely agree with Czachorowski who argues that what we do nowadays at the university didactic is outdated and still based on traditional committing notes to paper (Czachorowski, 2016). Furthermore, students are tested each semester to confirm their social skills and subject matter knowledge individually, even though academic curricula are set on collaboration. What I did was establishing educational-goaled discussion groups in the social media with them (mainly on Facebook) (Bielinis, 2017), but in the end it appeared that I tested my students traditionally, separately, so anyway it deprived them of a chance to cooperate during the learning process. Additionally, here in Poland, 'collaboration' has pejorative associations and means mainly cheating during exams.

In the past Autumn I started my regular classes with students in the frame of the course called General Pedagogy. It is intended for master degree students of Pedagogy and is mainly based on critical meta-reflection on Education and Pedagogy in general. My observations allowed me to assume that the course gives students a hard time. There are many texts to read, research reports to analyse, so that they are generally scared, when they see the course curricula for the first time. Moreover, I must force them to write tests after each bigger part of material[1]. I used to do it traditionally, according to my own experiences as a student. They had to pass writing or speaking test, individually. The last Autumn I proposed them to pass their tests connectively in small groups. I found a tool called *Mindmeister*, which is a site enabling people to work collaboratively on one mind map. I invited each of them for sharing the specific map, which was created as a result of two or three previous classes. Students brought their own laptops or tablets (one device for each team) and worked on problems, questions or matters that I prepared them as a review of few classes. Each team was able to see changes that were entered into the map by other teams. They could also finish their work at home or somewhere else. What they needed was a device connected to the Internet. As a result of their work I was able to print their maps and notes in a PDF file which was a vast document including their reflections, pictures, PDF articles, links to websites or movies, so it looked like a huge source of information and knowledge.

[1] General requirements for each course at the Polish Universities are determined in syllabuses, where learning outcomes and requirements for students are precisely set. In this course academics are obliged to examine students' knowledge, skills and competencies regularly.

Why connected learning through the network? Theoretical framework

Continuous explorations of the area related to learning concepts and theories, dedicated for adult learners, brought me to the point in which I am able to understand deeper the phenomena of digital, connected learning amongst students at the University. This was a result of twofold searches. On the one hand, I studied papers of researchers who explained the phenomenon associated with an emerging new generation of people, named differently – *Digital Natives* (Prensky, 2001), *Net Generation* (Jones & Shao, 2011) or *App Generation* (Gardner & Davis, 2013). On the other hand, I perused texts of authors who introduced the theory of Connectivism (Siemens, 2005; Downes, 2012) and explained the learning process in the digital era. These days, the digital space has dominated the environment and a lifestyle of people to such an extent that recent research findings allowed coining new terms for the generation of people born on the turn of the 20th and 21st centuries. The specific notions: digital natives and digital immigrants were introduced in Marc Prensky's article, titled 'Digital Natives, Digital Immigrants'. He claimed that the first one is an active user of Internet, games and computer language (Prensky, 2001). Nowadays, we are able to add tablets, smartphones and mobile applications to the above list. Contrarily, the author assumed that a digital immigrant is a person who had to learn the new technology and had to adapt to the new, digital life conditions (Prensky, 2001). The author noticed that contemporary pupils are diametrically different from the previous generation. They are no longer the people who educational system was designed to teach. He also emphasised that as a result of growing up in totally different living environment, the pupils' brains differ from brains of people who were born and lived in the pre-digital era (Prensky, 2001). Similarly, the notion Net Generation (Jones & Shao, 2011) refers to the dynamics of intergenerational changes. The author of this notion – Don Tapscott – claimed that the appearance of Internet has changed our world radically, and that all educational systems require reforms in response to these changes (Jones & Shao, 2011). According to Gardner and Davis (2013), we should call the people who are skilled to use the newest technology as representatives of the App Generation. They emphasised that the sociological or biological understanding of the term 'generation' as a group of people who were born and living about the same time or as descendants had to be extended into understanding the 'generation' notion as a group of people who is able to use the modern technology (Gardner & Davis, 2013). Noteworthily, it is highly likely that contemporary university students are indeed those digital natives, net or app generation representatives. According to R. J. Havighurst, university students may be defined as a group called young adults, including persons aged between 18th and 25th-30th years (Strelau, 2003). Developmental psychology researchers claim that young adults perform a high level of the ability

to learn and are generally in their highest intellectual abilities (Ziółkowska, 2005). Moreover, the processes associated with increasing mobility allowed them to explore different areas of the world due to communication mediated by the computer. The digital space offers favourable conditions for learning and transforming their skills (Ziółkowska, 2005).

Connectivism described by G. Siemens (2005), who introduced it as a learning theory for a digital era, highligthed its specific rules. He believes that the essence of learning is the latest and up to date knowledge, and also that it is more important to *know where* to find information than to *know what* and *know* how to learn, which are only very well known slogans. He also claims that learning is based on different opinions and is a process of connecting specialized nodes and sources of information. The major issue is that the learning process can take place out of human bodies – in devices. Additionally, Siemens stressed that the constantly changeable reality determines the learning of an individual who is permanently forced to make choices of what to learn. The process of making decision what to learn is being an essence of the Connectivism concept (Siemens, 2005). The author referred also to adult education. According to him, young adults experience learning by participation, knowledge extension and active actions, which are important in the context of dynamic socio-cultural and technological transitions. Thus, it is very important for learners to know how to act in scattered, incomplete information, in different teams, cultures, worldviews etc. (Siemens, 2005). S. Downes (2012) also explains the nature of the Connectivism theory which is, in some point, related to the socially based learning and to the idea of using technology to connect. The author understands the theory as the thesis that knowledge is distributed across a network of connections, which are formed by actions and experience (Downes, 2012). However, he signalises the existence of three knowledge types, with Connectivism being an exemplification of the new, third type of knowledge. Downes based his beliefs on an assumption that at the beginning of the 21st century there needs to be something more than only qualitative and quantitative knowledge, and finds the solution in connective knowledge. This one is not independent of knowledge derived from senses or calculation of logic and mathematics but it is assumed as knowledge of connections that appear in the world, and are created in that world as well as knowledge of impact that those connections have on the entities. The other significant aspect of connective knowledge is the fact that the idea of connections is considered as a way of knowing, so it is our understanding of what we know and how we know it (Downes, 2012). The author defines networks as a set of connections between a collection of things that may contain information. Networks that involve people may be represented by, amongst others: human brains, societies or social networks. What is very important, when considering a network is the fact that when we influence it, the connections of the obejcts in it

change and this also affects the storage of information (Downes, 2012). Connective knowledge is constituted by four major elements which are autonomy, diversity, openess, and interactivity. The reality that used to be presented to us in books, newspapers or by teachers in classrooms is not up to date anymore. And even if it still is, we unarguably live in a fragmented world, where we are able to collect information from many sources. This may afford us new opportunities in the learning process. If academics stop treating themselves as experts in every field and give students the chance to experience the content of numerous sources, it is more likely that our learners will become critical thinkers and will develop the ability to learn continuously (Downes, 2012). The aforementioned collaborative, electronic mind map tool, may – in may opinion – constitute a network of people who are autonomous, open, interacting and different from one another, and this may impact the development of developing students, their knowledge and societies in certain, connected ways. Today, I think we should search for answers to questions which are highly important when considering higher education, namely: 1/ How, when and where learning happens to contemporary young adults? 2/ How may we release learning amongst university students that are assumed to be digital natives? 3/ What may we do to support their learning process in a way tailored to their language and their understanding of the reality?

Methodological aspects of research

To find starting points in the search for answers to the above-mentioned questions, I decided to analyse the area related to students' cooperation during the University courses. I was specifically focused on observing their work on the electronic mind map and analysing their experiences related to that kind of cooperation. My intention was also to collect their statements, opinions and reflections so that I could draw some conclusions, which may be useful during the didactic process at the University and make further actions more transparent due to students' learning outcomes and their sense of learning. This situates the study in an evaluation research model. I understand evaluation after H. Mizerek, who defines it as a kind of social practices intended to change the existing state of things for a better one (Mizerek, 2017). According to him, evaluation generally appears after some action fulfilment. He argues that, practically, evaluation more often has a retrospective character, in which subjects of a reflection are effects of actions undertaken in the past or currently undertaken activities. He based his considerations on D. Schön's model, in which there were introduced two types of reflection: *reflection in action* and *reflection on action* (Mizerek, 2017). Actions that may be undertaken by a person who is a teacher and an evaluator (a researcher) at the same time, may be called the self-evaluation. This means that a

person, individually, collects data on the results of his or her own actions (Mizerek, 2017). My main aim was to find answers to the two following questions: 1/ What are students' opinions, experiences and reflections related to the socially embedded, collaborative learning during preparing electronic mind maps? 2/ In what areas courses at the University based on the Connectivism theory may release learning amongst young adults?

To gather empirical material, I used data triangulation, which made it possible to collect data from different sources and also allowed for better understanding the emerging categories (Konecki, 2000), and finally allowed me to find answers for previously-posed research problems. The data was collected through the *Mentimeter* tool (https://www.mentimeter.com), which is free, interactive presentation software, which allows preparing a set of slides, where a researcher may put several questions, tasks or assignments. The audience is able to answer these tasks online within using their mobile devices, which guarantees their anonymity. Moreover, both the researcher and the audience are able to see the results immediately after voting. I used the tool twice in each student's group after work on the mind map. For the first time I asked two questions. I was interested in students' assessments given on the electronic mind map as a learning tool. I used a Likert scale (point values from 1 to 5), where 1 meant very poor mark and 5 meant – excellent mark. I was also interested in participants' associations related to the electronic mind map, so I asked them to write three associations, which were presented as a word cloud. I was able to see the mostly appearing words and phrases related to the topic. During the second experiment, I used the same two tasks and additionally I asked students to write a short comment about their work with the mind map. To order my reflections related to the initiative I also decided to ask participants to write reflective essays (Kyles & Olafson, 2008) at the end of the course. I started with one initiating sentence, where I asked to describe their experiences gathered during work with the mind map and to think of situations or moments that were important from the perspective of their learning at the University. The *Mentimeter* software enabled the frequency analysis of the mostly used associations related to the map and also correlated statistical data. I also used SPSS software for statistical analysis. The short comments and reflective essays were analysed with using axial coding, according to significant, emerging categories as well as relations identified between them (Konarzewski, 2000).

Connected learning – leads and clues stemming from gathered research material and analysis

The statistical ones…

The categories, which determined the respondents and researched tool relationship, had Likert scale point values assigned. In each analysed group and term (altogether – 4 variants), a comparison was made with the X^2 test between the expected and observed frequencies. All analysed variants showed the observed frequency to differ significantly from the expected ones (X^2 = from 71.11, $p < 0.001$ to 125.31, $p < 0.001$). Additionally, mean values equaled 3.82 (Tab.1). This means that the tested tool was positively assessed by the respondents. The prevalence of choosing the specific answers for all variants is presented in Table 1.

Table 1 **Prevalence of choosing answers**

Point value	Answer	Prevalence	Percentage	Cumulative Percentage
1	Very poor	0	0	0
2	Poor	0	0	0
3	Fair	32	40.5	40.5
4	Good	29	36.7	77.2
5	Excellent	18	22.8	100
	Total	79	100	

First impressions, opinions and associations

The analysis of first associations related to the electronic mind map tool brought interesting findings. The word clouds showed the biggest words or phrases, which means that participants used them most commonly as associations. Additionally, I decided to enumerate synonymic words (that were also used by students) in brackets. It turned out that in the students' group 1 (GR. 1) there were similar associations in both terms of testing but they were not the same. The dynamics of changes were observed in exchanging places of the most commonly indicated words. In the first term, they highly acknowledged the following connotations: INTERESTING (pretty, intriguing), TECHNICAL PROBLEMS (difficult, problematic), MODERN (new, something new), TRANSPARENT (clarity, detailedness), COOPERATION (collaborative work, fast team work, integration), CREATIVITY (imaginative), ENTERTAINING (education plus fun). While in the other term, they indicated the role of: COOPERATION (collaborative work, it simplifies cooperation, sharing duties), TECHNICAL PROBLEMS (problematic, difficulties, problems, confusion, weak signal, bad faculty conditions), INTERESTING (pretty), and CREATIVITY (creative, innovativeness).

Figure 1. **Word Cloud – group 1 (second term)**

The other word cloud allowed me to clarify that technical problems were probably more related to the University back shop than to the lack of students' abilities to work on the tool. It is also important to say that in the second term they moved toward associations related to cooperation and creativity. This means that the participants recognised the value of collaborative work. There were also some statements (in both terms), which were not the most commonly indicated but seem to be significant from the perspective of learning at the University. Students pointed out (amongst others): educational, scientific, science, activities during classes, the most important information, searching for information, easier learning, news, easy way of studying, pedagogy, it forces to think, concentration, involvement, openness, PDF version, availability, preciseness, and technological advance. The associations coincided with their short comments that I asked them to write later. The following statements represent the groups of their previous associations. The highest number included contents related to the words interesting and modern. These two statements exemplify participants' reflections: *Thanks to that, the classes are interesting and different from others (GR. 1 St. 1). It is intriguing and I am very pleased to work on the map (GR. 1 St. 2).* There were many statements where students stressed the technical problems out. This time I was sure that on the one hand students had some objections to the tool functioning but on the other hand they pointed out the University technical conditions as a problem. These sentences present their reflections: *Although working with the mind map is an interesting form of collecting knowledge, it poses many problems, for example: moving or deleting the maps' elements (GR. 1 St. 4). I really like the mind map as a method, but the University conditions does not favour the effectiveness of work on it (GR. 1 St. 5).* Also the aspects related to the

tool functioning were interesting. Although the tool allowed us to work collaboratively on one mind map, even at the same time, there were some problems with using it properly. For instance, when somebody deleted something accidentally all of users had to log out from the map so the person could cancel his or her last action. It also happens that some of them deleted somebody else's work by coincidence and the team lost its foregoing results. It was important especially when they had the first contact with the tool. It seems to me that later on, students felt more confident and these problems were not the most important for them. They reported that they prepared some notes in a word file firstly, saved them on the laptops and then entered them into the map. That is why I reckon mixed statements in many of their comments, including information that however there were technical problems, the method of learning was still interesting for them: *The map is something new and interesting, but there are some problems related to using it. It goes down during the work (GR. 1 St. 6).* There were also some comments related to cooperation, creativity and technological advance in the first group. Students admitted that: *Working with the mind map is very pleasant and thanks to it we can cooperate with our colleagues and improve relations with them (GR. 1 St. 7). It shows that classes may look different (better) than I could observe at the University so far (GR. 1 St. 8). I think that the mind map was well developed. It was casually to work with it. The more you commune with it, the less problems you have (GR. 1 St. 9).* I was surprised that one of them admitted that the map was useful for exams passes. The strand connected to the learning process was emphasised in the following statement: *It is easier to prepare a note in the map, so you can learn faster (GR. 1 St. 10).*

Figure 2. **Exemplary short comments of participants**

Both terms in the second group (GR. 2) resulted in most common indicated association, which was COOPERATION (community, team work, integration, collaborative work, team, action). The most important words or phrases in both terms were also: INNOVATION (innovativeness, modern, modernity, novelty, ingenuity, and innovative), REVIEW (a collection of information, thoughts, perpetuation of the news, all in one place, summary, gathering information, revision, orderliness), TECHNOLOGY (online, Internet, virtuality, e-learning, visualisation), LEARNING (knowledge, general pedagogy, thinking, associations, a note, notes, a collection of thoughts, a tip, all in one place, educational tour guide, good way for learning, it is easy to line it out, concrete information, effectiveness), CREATIVITY (fertileness, variety), and LINKS. There were also a few words mentioning the rough time with the map: difficult, complicated, and a challenge. In comparison to the first group, there were not many associations indicating technical problems related to using the tool. At this point, group 2 was more focused on emphasising the learning and cooperation aspects of the *Mindmeister* software. That fact was acknowledged by students' short comments: *It is better to study from the source, in which all is gathered together (GR. 2 St. 1). It is a cool way for collaborative work, exchanging beliefs or opinions on the topic as well as reviewing subject matter knowledge (GR. 2 St. 2). Gathered and saved information in PDF file is a great revision (GR. 2 St. 3). At the beginning it was quite hard to work with the map, but it has changed when I get used to the tool. (…) Cooperative effort allowed us to do a lot more (GR. 2 St. 8).* The above-cited statements indicate that the surveyed students may be the representatives of the Digital Natives generation (Prensky, 2001), which does not have to adapt to the new life conditions. These young adults were perfectly content with the possibility of having the gathered information in one place as well as of the fact that they may use PDF files (prepared as a result of their learning through the mind map tool) as notes for learning. This also corresponds with the theory of Connectivism (Siemens, 2005), especially with its part related to the *know where* (to find information) slogan. Although participants emphasised the important role of cooperation and learning through the mind map, their short comments exposed some technical problems that were mentioned in the group 1. They reported the following difficulties: *It is hard to work on the mind map, because in an easy way you can delete the whole entered text (GR. 2 St. 9). The biggest problem is the fact that we are unable to undo the accidently deleted 'clouds' (GR. 2 St. 10).* Those comments do not indicate that there was a problem associated with a low level of technical equipment of the University building. I remember that classes with group 2 took place in a better-equipped classroom at the Faculty. I interpret those comments as the inconvenience for participants arising from their lack of knowledge of how to use the researched software, which was new for them. Indeed, the students met the tool for the first

time in our class. There was no tutorial or anything like this before. I explained them everything during the first review and I was helping them constantly when they reported me any problems back. However, it is worth adding that this was also my first experience with using the tool collaboratively. Previously, I used the tool during workshops for schoolteachers beyond the University, but at this moment I understand that it was not enough experience. For instance, I was really surprised that we were unable to undo the last action (on the map) if there were other people logged in. Although the collected material at this point allowed me to get to know the first impressions, associations and opinions of students related to using the electronic mind map, I was still not able to answer the question about the areas in which connected work could release learning amongst researched participants. That was the main reason of carrying out the further explorations. At the end of the course I asked students to write reflective essays in which I called on them to describe their experiences related to the topic and report moments or situations that were the most significant from the perspective of their learning at the University. The analysis of the gathered empirical material is presented below.

Analysis of the contents of students' reflective essays

Sense of the new experience and difficulties associated with it

Meeting the tool for the first time in our classes resulted in two main threads that were appearing in students' essays. Firstly, they emphasised the novelty of the experience: *These were my first classes with using this technique of learning (Gr. 1 St. 9), In my experience, the mind map is undoubtedly, entirely new technique (Gr. 2 St. 5).* Secondly, I was able to discover first reactions as well as emotional states that emerged from the written stories. These were mainly curiosity and surprise: *I have never had an opportunity to work using the mind map software (I had no idea that anything like this even existed) (Gr. 2 St. 22), It was new, I met it for the first time at any classes at the University (Gr. 1 St. 11), Doing that kind of review interested me very much (Gr. 2 St. 16)*. One of them developed longer story about the novelty of the technique used. She said that right after the first class with the mind map she told about it her cousin who lives in England. She stressed the fact of completely modern learning. The reaction of a cousin was following: *'You really have not tried it before at Uni? We employ mind maps in most classes!' (Gr. 2 St. 11).* This means that preparing mind maps is a novelty only to the surveyed Polish students, and at the same time that the technique was being used for a longer period at British Universities (at least at one). This also sets us (academics) in front of a challenge of introducing students as many elements of new educational methods as possible. Nevertheless, the novelty and new experiences do not have to mean that participants felt happy with the new technique in all cases. Many of them reported difficulties that they

experienced during working with the mind map tool, which was thought out as a matter of the Connectivism concept. The empirical material gathered from students' essays allowed me to single out three groups of technical problems that they encountered most commonly. These were problems related to the tool limits, University back shop, and unfamiliarity of the tool. Some testimonies were also mentioned in students' short comments, which were analysed above. Students had a chance to explicate their thoughts in essays, where they pointed out: *(…) something may be deleted, something may be moved. It is a waste of time and I lost a good idea for a few times because of this. (Gr. 1 St. 13), All users had to stop their work and log out from the mind map, to recover an element that was accidently deleted. That disorganises work very much (Gr. 1 St. 5).* There were many statements similar to these and as I mentioned before I was extremely surprised and disappointed when these situations happened during the class. I was not able to predict them even if I had tested the tool before, however I must admit that the students were right. The only thing I could do was to help them to recover lost files or explain them the usage of the tool again so they were getting used to it more and more in each class. I also decided that I would not mark them for preparing the first map as a review. I observed that this decision made them feel more comfortable and distressed. The other mentioned difficulties were connected to the University amenities: *The only one drawback, which is quite important for me, is the fact that our Faculty is not adapted to the situation that all students participating the class may use their own devices at the same time. What I mean is the lack of power sockets. (Gr. 1 St. 10).* Although the student admitted that it was the only one disadvantage, later on she continued the story associated with technical problems at the Faculty: *The other barrier is the lack of Wi-Fi at academy. It hampers the work quite strongly. (Gr. 1 St. 10), It is important to have a good Internet connection, because although we add some elements into the map, they do not appear there (Gr. 1 St. 5), This technique has got many pluses, the conditions of conducting classes effected on us adversely. That is why I have mixed feelings (Gr. 1 St. 9).* There should be two comments added here. As I mentioned before, students' group 1 definitely had much more technical problems related to that kind of work because of the worse equipped room that they had classes in. The sockets were broken twice during our review. The other comment concerns the first reflection that I had after reading their essays. According to some of their statements, I should reconsider organisational issues next year. I believe I can book a better classroom in the Faculty building. The most surprising aspect of that part of the analysed material was the fact that the participants (both groups included mostly women) reported impediments in the matter of attending on the tool. Although only two students mentioned about difficulties with the tool language, which was English: *It is a pity that the map is written in English, for me – a person who poorly knows that language it causes little inconvenience,*

because I had to fly blind (Gr. 1 St. 14); many of them reported emotional states that accompanied them as a result of not knowing the tool: *First encounters related to technical problems and poor understanding of this software made me feel disaffected (Gr. 1 St. 1), At the beginning I was sceptic to the idea, because I was never able to learn with using the media (Gr. 2 St. 5).* According to many statements that reported those difficulties, I initially assumed that probably not all of contemporary students are able to use the newest technology, and are the representatives of the App Generation (Gardner & Davis, 2013) or Digital Natives (Prensky, 2001). Nevertheless, many subsequent declamations contradicted my first considerations. I believe that accumulated aspects, which were: lack of Wi-Fi and sockets, tool's options limits and first emotions related to using something entirely new for them, might affected their impressions and reflections. Their ulterior statements proclaimed that they needed a little bit of time to get used to the tool, so they felt more comfortable with it and were using it with any problems: *Everyone was using the application much better after several tries and then less problems came up (Gr. 1 St. 4), The second review went smoothly. Creating files and adding new contents to the map gave us a lot of satisfaction (Gr. 2 St. 11).*

'Knowledge in a nutshell' from surmounting difficulties to learning process optimisation

Detailed analysis of essays confirmed my belief that the more familiar students were to the tool; the more practical applications of it were detected by them. These issues were mainly associated with the utilitarian value of learning in the course that is designed on the basis of Connectivism. Participants emphasised the role of simplicity of preparing notes as a result of their work presented in a PDF file: *It saves our time, we can learn from the PDF file straight away (Gr. 1 St. 8).* Some statements convinced me that what they needed was a well-prepared, short and concrete report, which is relevant to a specific topic: *The mind map gathers the most important information that is easy to remember. So we do not waste our time for general things but particular ones that are concerned with the topic (Gr. 2 St. 1).* I would actually call it as one of them declared: *In my opinion it is 'knowledge in a nutshell', which literally means that everything what we need to know is there (Gr. 1 St. 2).* It is worth adding that the mind map was a brilliant tool for those who represent visual learning style and like to fix something in their brain graphically: *For me it is easier to remember something if it is written with using etiquettes, if it is coloured and drawn up (Gr. 1 St. 7), For instance, when I was learning about the globalisation process, I reminded myself the green colour and its location in the map straight away (Gr. 2 St. 12).* Also colours, emoticons and map's branches supported the process of remembering knowledge: *Additionally, to remember the part of material there are symbols available in the tool that may be used according to our associations (Gr. 2 St. 12).* In further students' statements there were phrases that indicated

their awareness of theoretical background related to scientific knowledge about the brainwork. Some of them admitted that the process of mind mapping involves both hemispheres of the brain: *The map allows using both cerebral hemispheres (Roger Sperry wrote about it), so it is not enough that we had an opportunity to connect knowledge gathered during classes, but additionally we improved our brain (Gr. 2 St. 1).* Probably, this resulted in remembering where to find specific information or part of material that was needed by students night or day: *Few weeks later after first review (…) I had to refer to the example, which was mentioned in our map – stages of a lifecycle. I did not remember what was the name of the theory that introduced that topic. So I logged into the map, opened it and then I could make inquires without long searches or any problems (Gr. 2 St. 11).* I reckon G. Siemens would say that this is the essence of Connectivism – know where to find the needed knowledge, which in his belief is more important than to know what and how to learn. Although participants' essays included mostly statements that convinced me to continue my action in the future, I must admit not all of them were only positive. Some students said that even if they were quite happy with using it during our classes, it still seems unpractical in their everyday life. Two of them emphasised that it is much better to prepare a map just by them, so it is more readable and understandable for an individual person: *We do not know all the times what was in somebody else's head and what he or she was thinking of. Some people use shortcuts that are not understandable for others (Gr. 1 St. 5), It is important for more effective learning to create a map individually, because everyone learns differently. Then the 'journey' through the map is easier and we are orienting better on it (Gr. 2 St. 22).* These statements may indicate the fact that young adults represent different learning styles, and even if we offer them classes that include elements of new media or new technologies, which are generally very popular among the new generation, it does not mean we are permitted to do it without any reflection on the learning styles that are represented by students.

Reinvented learning, and arising cooperation

Non-traditional form of testing the students' background in General Pedagogy course had an effect on their longer testimonies related to a matter of contemporary learning process at the University. Three groups of codes: emotional statements, educational advancement and stopping the monotony were interchanging with two other groups of codes, which were called variety of opinions and sources as well as places, spaces and time of learning. The participants' emotions expressed in essays were mainly enjoyment, happiness, and amazement. Here are some students' statements: *Step by step I was learning how to use the software, which made me jolly, and it was mainly the springboard out of our grey, University everyday life (Gr. 1. St. 1), I really liked leaving the monotony of classes. First lesson resulted in highly positive perception and*

curiosity (Gr. 1 St. 9), I am glad that we begin to use that kind of 'news' at our University increasingly and we move with the times (Gr. 1, St. 17). Participants from the group 2 emphasised the issue connected with stopping the monotony much earthier than the first group participants: *The classes were non-standard as most of them. It is a good move, in terms of strong and fast new technology development (Gr. 2 St. 24), (…) we used the electronic form, which is rarely practised during studies, because most of teachers are rather focused on the traditional forms of learning (Gr. 2 St. 1).* Students also indicated educational advancement during assessing the tool. They understood the advancement as combining the educational process with the newest technology. Here is the statement that represents this issue: *The mind map connects education with technology, which is a huge step forward and advancement in our country and in Polish education at all. Anyone else (…) has not entered me into that model of teaching and conducting classes before (Gr. 2 St. 17).* Furthermore, the participants stressed the fact that education shall be based on creating knowledge through apposing different points of views, opinions and information sources, which took place during our classes with the electronic tool. That experience was raised in majority of participants' essays: *Thanks to that we are able to create a conversation for a specific topic, because each of us has got distinct opinion, he or she interprets some things/matters in a different way – it is very important (Gr. 1 St. 3), We did not have to focus only on stark theory, but we also had to use a variety of movies, and articles that were in the Internet and reflected a specific topic. (Gr. 1 St. 4).* Siemens (2005) argued that adult education has its specific rules in connected environment. Some of them are: active participation in the process of learning, extending the scope of knowledge and using different sources when an individual learns. He also emphasised that in the digital era, the learning may take place in devices. I reckon this issue clearly emerged in the stories of participants. Additionally, they described different spaces, places and time of learning, which are not so obvious nowadays and may not be limited to the University or library building walls: *It was pretty that we were able to modify the map many times and in all places. What you needed was only a mobile phone, and the time of work was not precisely specified (Gr. 1 St. 4), You do not need to sit at home or in the library, but you may have a look into the map in each free moment – even in a bus on the way to classes (Gr. 1 St. 5), I mostly liked the fact that we could fill it in at home, during the breaks between classes or in a tram (Gr. 1 St. 8).* The last statement made me think of issues related to the cooperation amongst young adults during the classes. The student said: *We could fill it in (…),* which literally means that she was not doing it just by herself; there were definitely some of them working on the map. Frankly speaking (even as a researcher), I was not interested how many of them were working together. I assume the most important thing was the fact of cooperation at all. Further

participants' stories brought me to the point, in which I can certainly say that a lot of them were *learning the cooperation*, and what is more important they were *learning due to cooperation*. I presume that probably the first contact with the tool that demonstrated them how to work together could initiate the process of learning the cooperation, and then work teams were learning due to cooperation. Following fragments of students' stories may depict the fact of learning the cooperation: *We could learn to cooperate. It was not based on the rule 'I am thrown back on myself' (Gr. 1 St. 3), Mind mapping allowed us to develop collaborative work skills (Gr. 1 St. 6), This form of work realised me that other people, who were members of the team had their own opinions and we needed to take them into account (Gr. 1 St. 12).* On the other hand, these statements support the track related to the process of learning due to cooperation: *The way our map is created intrinsically involves all participants of a meeting, stimulates into thinking, associating, searching for relationships. These are difficult to receive in traditional learning conditions (Gr. 1 St. 10), We shared problems with each other, and we solved them together (Gr. 1 St. 6), We could debate on many interesting topics, argue a little bit, but then we developed the best version of the discussed topic together (Gr. 2 St. 24).* Additionally, some of them suggested that I should share the idea of mind mapping and collaborative work with other academics: *I would like other teachers to use that form of testing, because I learn best through the contact with other person (Gr. 2 St. 7).* 'It's a pity' describes best many of participants' testimonies related to the fact that not many academics use new technologies and collaborative work techniques during University classes.

Benefits and imperfections of connected learning

The idea of carrying this research out originates from my former students' opinions related to testing them at the University. The students of our Faculty are used to preparing projects and presentations together, but this only results in a single mark, which is a part of their final grade received from the course's teacher. That is why, I assume, some of them asked me many times: Why do you want me to learn connectively but finally you test me individually? The answer to this question probably depends on academics' own experiences and usual habits, University curricula requirements or something else, which actually may be a good idea for further investigations. This one included only questions regarding students' opinions and reflections related to using the new, electronic technique of work and the areas associated with releasing learning among young adults through the courses that were based on the Connectivism concept. The collected and analysed material showed that there were some areas, which seemed to be significant from the perspective of releasing learning amongst adult learners. First of all, it was a positive perception of the proposed technique of revising material.

Secondly, initial associations and short comments testified that the mind map as a tool was mainly connoted with cooperation, novelty, creativity, technology, and learning at the University. Unfortunately, as a result of both: unfamiliarity with the tool and technical inconvenience of our Faculty, students experienced difficulties related to using the *Mindmeister* tool. I believe this might inhibited the process of learning and releasing learning amongst them. Similar issues were also observed and described by M. Spitzer in his book titled 'Digital Dementia'. However, detailed analysis of participants' essays allowed me to conclude that preparing classes based on the Connectivism concept that includes usage of mobile devices, laptops, Internet collaborative work, and creating a set of connections, may release learning in some areas. The following ones seem to be the most interesting from the perspective of previously asked research questions. Though connecting traditional methods of conducting classes with the latest technology was a beneficial experience, learning through the tool disconvenienced students somehow. This was a result of insufficient tutorial and the lack of WiFi in a few classrooms at our Faculty building. This draws a conclusion to think of limits and problems that may appear in the process of carrying out classes before their start. However, the matter related to familiarising students with the new technique may be solved spontaneously if academics give some attention to them. In the text, I presented that the participants got used to the tool quite smoothly with time and additionally they spied some learning improvements that the software offered them as learners. These were mainly: graphical options, which supported remembering, issues related to saving time and having notes in a PDF file that assured them where to find the needed information. The map was especially utile for students who probably represented visible learning styles, which may be a piece of advice for those academics who know their students quite well. A good orientation may be helpful when we choose optimal ways of working for students' groups. On the other hand, introverted students may feel uncomfortable with this technique. The greatest finding was the fact of learning the cooperation within students' groups and as a result of this, learning due to cooperation. Students' essays evidenced that they were hungry for cooperation during University education because it did not happen to them very often. Different places and time of learning as well as variety of sources that are highly needed in the process of their learning draw my attention to the need of further explorations in the area concerning informal learning or non-formal education at all. Also the matter of cooperation during University classes requires deeper insight.

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ФОРМИРОВАНИЕ ЦЕННОСТНО-СМЫСЛОВЫХ ОСНОВ ПЕДАГОГИЧЕСКОЙ ПРОФЕССИИ В ВУЗЕ

Formation of Valuable-Sensitive Bases of the Pedagogical Profession in the University

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Abstract. *The authors of the article present a study of the features of the value-semantic bases of the activity of students of a pedagogical university of 1 - 5 courses, describe the dynamics of the phenomenon studied during the training. The authors comprehend the relevance of this problem in the context of modernizing pedagogical education. Based on the leading principles of the concept of professional development of personality, the authors describe one of the components of professional identity - value, the features of the crisis of the third year and the leading terminal and instrumental values during the professional training of students in the university.*
Keywords: *students of a pedagogical university, pedagogical education, value-semantic basis of personality, values.*

Введение
Introduction

Изменения в системе профессионального образования являются следствием происходящих в России общественно-экономических трансформаций. Одним из главных факторов, определяющих эти изменения, является насущная необходимость повышения уровня профессионализма выпускников на основе формирования заданных современностью профессиональных компетенций. В психолого-педагогической науке и практике разрабатываются все новые подходы и методики решения выше обозначенной задачи. Одни из них основываются на использовании новых информационных технологий при подготовке квалифицированных специалистов, другие – на обновлении содержания

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подготовки, третьи – на усилении практической ее направленности и т.п. Однако решение проблемы повышения качества подготовки специалистов невозможно без формирования ценностно-смысловых оснований профессиональной деятельности.

Анализ работ и диссертационных исследований по проблемам профессионального образования свидетельствует о том, что в настоящее время, несмотря на высокий научный интерес к теоретическим основам формирования различных аспектов профессиональной компетентности в процессе обучения, становлению ценностно-смысловой сферы личности современного педагога и специфике её развития в условиях педагогического вуза должного внимания не уделяется ни в рамках Федеральных государственных образовательных стандартов, ни в научных исследованиях, ни в практике преподавательской деятельности (Коряковцева, Бугайчук, & Калачева, 2017).

В этой связи особую актуальность приобретает проблема изучения особенностей формирования ценностно-смысловых основ профессиональной деятельности у студентов, которые выбрали педагогическую профессию в изменяющемся мире, что и явилось целью нашего исследования.

Теоретические основы исследования
Theoretical substantiation of the problem

Процесс обучения в вузе сопровождается, по мнению многих исследователей, становлением профессиональной идентичности (Ю. А. Кумырина, Т. В. Бугайчук, А. А. Озерина, Ю. П. Поварёнков, А. А. Шатохин, Л. Б. Шнейдер и др.). При поступлении в вуз перед человеком стоит задача овладеть профессией, которую он для себя выбрал. При этом он редко задумывается о том, как может повлиять профессиональное развитие в процессе обучения на его жизнь в целом. Открывающиеся перед будущим специалистом новые горизонты стимулируют личностное развитие, расширяют и углубляют уже сложившуюся систему ценностей и представлений, в том числе профессиональных.

В рамках концепции профессионального становления личности, предложенной Ю. П. Поваренковым, формирование субъекта в процессе профессионального пути осуществляется посредством разрешения целой системы противоречий, которые задаются базовым противоречием между социально-профессиональными требованиями к человеку, с одной стороны, и его желаниями и возможностями их реализации, с другой. Одно из таких противоречий заключает в себе профессиональная идентичность, так как на

различных этапах профессионализации направление и уровень развития ее основных параметров могут не совпадать. Принимая себя как профессионала, человек может сомневаться или отвергать профессиональные ценности, которые ему навязывает профессиональное сообщество. Принимая профессиональные ценности, человек может быть неудовлетворен содержанием и условиями профессиональной деятельности, особенно на начальных стадиях формирования профессиональной идентичности (Поваренков, 2003).

По нашему мнению, адекватное профессиональное самоопределение, сформированная система профессиональных ценностей и достигнутая профессиональная идентичность определяют правильный выбор профессии и успешное функционирование в ней. От них зависит экономическая и педагогическая эффективность обучения студента в вузе. Проблемы, возникающие в процессе профессионального самоопределения, становления профессиональной идентичности приводят сначала к нежеланию адаптироваться к условиям профессионального обучения, потере личностного смысла в нем, а впоследствии - к профессиональной дезадаптации, профессиональному кризису, профессиональным деформациям и невозможности самореализации. Именно в период студенчества происходит целенаправленное освоение системы знаний, практических навыков и умений, ценностно-смысловых основ избранной профессиональной деятельности; формирование целостных представлений о данной профессиональной общности; развитие и наполнение предметным содержанием мотивов и целей будущей деятельности, то есть - развитие профессиональной идентичности студента (Мищенко, 2005).

Аспект оценки принятия ценностей профессионального сообщества индивидом в научных трудах, отражающих вопросы профессиональной идентичности, разработан в меньшей степени. Данная процедура оценивания моделирует процесс идентификации, который описывается в рамках ценностного похода к развитию идентичности. Суть развития профессиональной идентичности при таком понимании заключается в проецировании собственной системы профессиональных ценностей и позиций на представления о ценностях и позициях, которые, по мнению субъекта, характерны для конкретной профессиональной общности. На основе сопоставления ценностей происходит принятие решения об уровне профессиональной идентичности. А на основе принятия ценностей профессиональной общности и их сопоставления с индивидуальными, происходит корректировка и развитие последних, что особенно важно на начальном этапе профессионализации.

Материалы и методы исследования
Materials and methods

Для выявления основных особенностей принятия ценностей профессионального сообщества у студентов педагогического вуза нами были использованы следующие методики: «Ценностное ориентационное единство (ЦОЕ) (модифицированный вариант)» с целью исследования ценностей профессионального сообщества; «Смысложизненные ориентации (СЖО)» Д. А. Леонтьева для изучения индивидуальных и групповых представлений о системе значимых ценностей (Мищенко, 2005). При анализе полученных данных использовались статистические методы обработки результатов исследования (вычисление средних значений, показатель вариативности, корреляционный анализ, факторный анализ), для оценки статистической значимости использовался U-критерий Манна-Уитни, ранговый коэффициент корреляции Спирмена. При обработке эмпирических данных использовалась компьютерная программа «Statistika».

В исследовании приняли участие студенты 1-5 курсов педагогического университета (двухпрофильный бакалавриат, специальности физико-математического факультета и факультета социального управления). Выборка составила 185 человек, из них подвыборка студентов 1 курса – 48 человек, 2 курса – 35 человек, 3 курса – 41 человек, 4 курса – 37 человек, 5 курса – 24 человека.

Результаты и их обсуждение
Results and discussion

В ходе использования методики «Смысложизненные ориентации» по показателю «Принятие ценностей профессионального сообщества» выявилась следующая динамика отношений к ценностям профессии:

1. Динамика ценности «образованность» с 1 по 3 курс показывает рост её значимости, но на 4 и особенно на 5 курсах отмечается резкое снижение.
2. Наблюдается следующая динамика ценности «эффективность в делах» - с 1 по 3 курс значимость данной ценности невысока, на 3 и 4 курсе отношение к данной ценности одинаково, но на 5 курсе отмечается значимое повышение ранга «эффективности в делах».
3. Значимость ценности «интересная работа» с 1 по 2 курс растет, на 4 курсе наблюдается ее увеличение, но на 3 и особенно на 5 курсе отмечаются «низкие ранги».

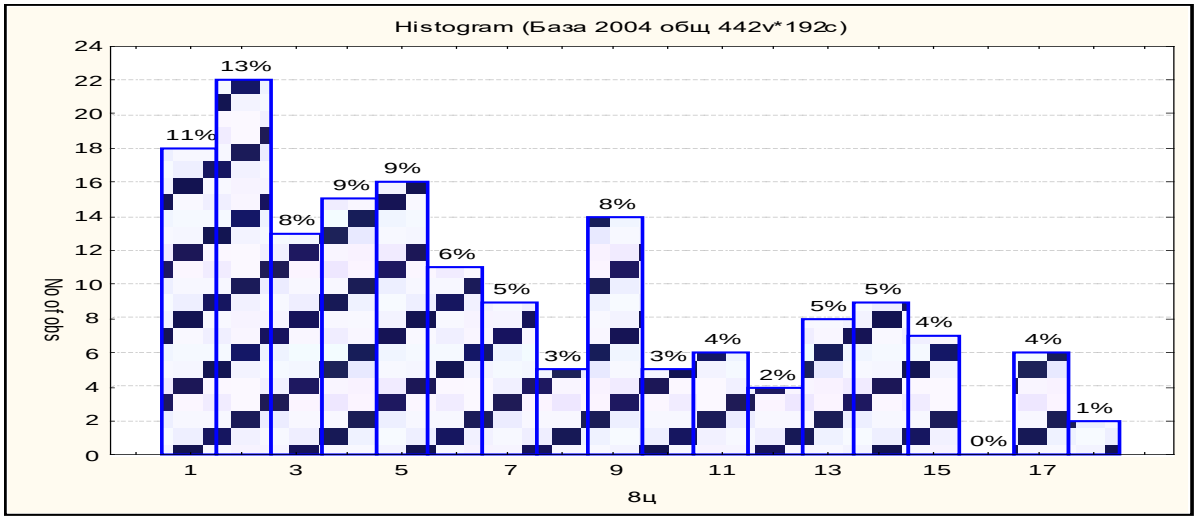

Рисунок 1. **Процентное распределение по рангам для всех курсов по ценности образованность**

Fig. 1 ***Percentage distribution by rank for all courses by the value of education***

4. По такой терминальной ценности, как «материально обеспеченная жизнь» идет плавное снижение значимости с 1 по 5 курс.
5. Низкие ранги на 1 курсе отмечены по следующим ценностным ориентациям: жизнерадостность, независимость, самоконтроль, твердая воля, любовь, наличие хороших и верных друзей, развлечения, свобода. Высокую ценность имеют учебная ориентация, ориентация на профессию.
6. Студенты 5 курса считают неважным следующие ценности профессионального сообщества: исполнительность, образованность, ответственность, рационализм, чуткость, активная деятельная жизнь, здоровье, интересная работа, материально обеспеченная жизнь, счастливая семейная жизнь. Можно отметить, что ценности, необходимые для успешной профессионализации, ставятся студентами – пятикурсниками на последние места, что говорит о кризисе профессионального развития по данному критерию профессиональной идентичности.
7. Приоритетной ценностью для всех курсов является ценность «воспитанность». Ценность «высокие запросы» имеет обратную тенденцию: данная ценностная ориентация совершенно не значима для студентов всех курсов, такая же тенденция наблюдается по ценности «Непримиримость к недостаткам в себе и в других».

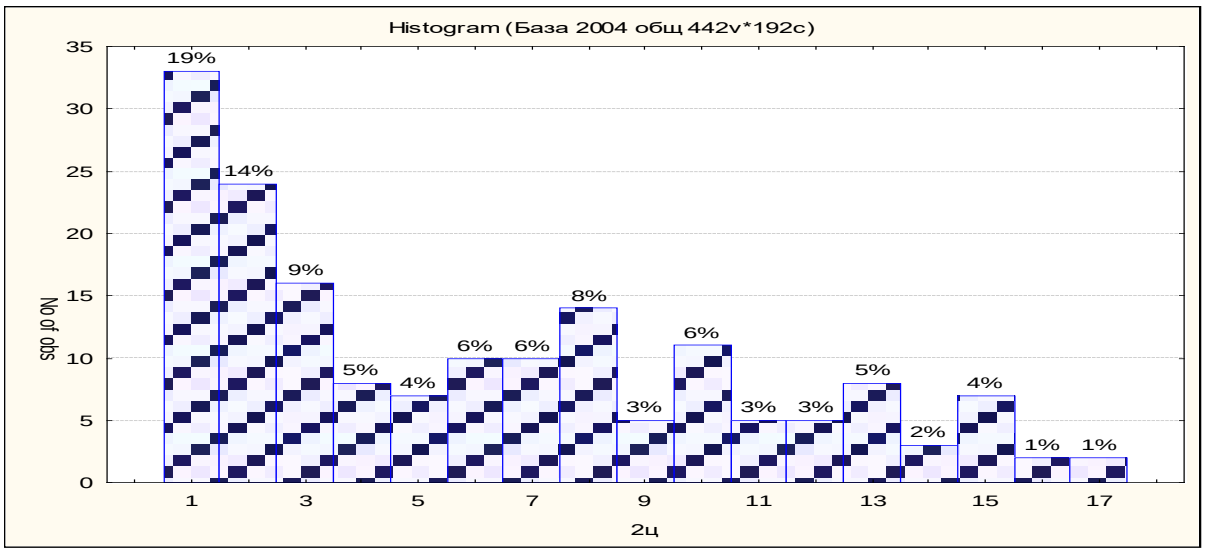

Рисунок 2. **Процентное распределение по рангам для всех курсов по ценности воспитанность**

Fig. 2 ***Percentage distribution by rank for all courses in value mannerliness***

8. Для всех студентов высока значимость ценностей «образованность» и «ответственность».
9. По такой терминальной ценности, как «здоровье» всеми отмечена высокая значимость.
10. Значение ценностей «развлечение» и «счастье других» невысоко для студентов всех курсов.

По методике «ЦОЕ» выявилась следующая динамика отношений к ценностям профессии: наблюдается постепенное уменьшение значимости ценности «уравновешенность» с 1 курса по 4 и принятие её к 5 курсу.

Таблица 1. **Распределение ценностных ориентаций с 1 по 10 место по методике ЦОЕ на всех курсах (усредненный ранг)**

Table 1 ***Distribution of value orientations from 1st to 10th place according to the method in all courses (averaged rank)***

ранги	семестры					
	2	4	6	8	10	Все
1	Активность	Квалифициро-ванность	Квалифици-рованность	Гуманность	Коммуника-бель ность	Активность
2	Воспитанность	Коммуника-бельность	Воспитан-ность	Трудолюбие	Квалифици-рова нность	Трудолюбие
3	Целеустрем-ленность	Целеустрем-ленность	Активность	Инициатив-ность	Организован-ность	Гуманность

4	Квалифицированность	Воспитанность	Порядочность	Настойчивость	Ответственность	Инициативность Коммуникабельность
5	Организованность	Активность	Коммуникабельность	Гордость	Целеустремленность	Объективность
6	Честность	Интеллектуальность	Интеллектуальность	Наблюдательность, Сдержанность.	Объективность	Квалифицированность
7	Коммуникабельность	Организованность	Тактичность Трудолюбие	Объективность	Активность, Уравновешенность	Ответственность
8	Тактичность	Сдержанность	Инициативность, Целеустремленность.	Самостоятельность.	Трудолюбие	Организованность, настойчивость
9	Интеллектуальность	Уравновешенность.	Компетентность	Увлекаемость	Интеллектуальность	Коммуникабельность
10	Трудолюбие	Тактичность	Организованность	Уравновешенность	Компетентность.	Сдержанность. Тактичность

Динамика ценности «квалифицированность» следующая: с 1 по 2 курс значимость данной ценности резко растет, но на 3 и особенно на 4 курсах отмечается снижение показателя, к 5 курсу он снова увеличивается. Значимость ценности «компетентность» увеличивается с 1 по 3 курс, на 4 курсе наблюдается спад интереса к данной ценности, к 5 курсу её значимость снова возрастает. По такой ценности, как «креативность» наиболее низкий показатель значимости наблюдается на 1 курсе, к 3 курсу этот показатель имеет самое высокое значение, с 4 по 5 курс значимость данной ценности снижается.

«Любознательность» вовсе не ценится на 5 курсе, но более всего она значима для студентов 3 курса. Ценность «оптимистичности» плавное уменьшается с 1 курса по 5. Значимость ценности «организованность» постепенно снижается к 4 курсу, а на 5 курсе снова увеличивается. Наблюдается следующая динамика ценности «самостоятельность»: - с 1 по 3 курс её значимость уменьшается, на 4 курсе наблюдается резкое увеличение, но на 5 курсе вновь отмечаются самые низкие показатели значимости данной ценности.

Увеличение значимости ценности «целеустремленность» происходит с 1 до 2 курса, с 3 по 4 курс отмечается тенденция уменьшения значимости до нуля, на 5 курсе показатель значимости вновь повышается. Наблюдается следующая динамика ценности «самоуверенность» - с 1 по 4 курс значимость данной ценности постепенно снижается до нуля, а на 5 курсе отмечается повышение ранга этой ценности.

Большое количество ценностей, имеющих, по мнению студентов, низкую значимость, указывается студентами 4 курса (например, активность, воспитанность, уравновешенность, интеллектуальность, квалифицированность и т.д.), но в то же время на этом курсе отмечается достаточное количество ценностей, имеющих самые высокие показатели (гордость, гуманность, инициативность, критичность и т.д.). Такой результат противоречит ценностно-смысловым основам, декларируемым профессиональным сообществом. По нашему мнению, причиной этого противоречия является достаточно долгий период педагогической практики на данном курсе.

Заключение
Conclusions

На основе исследования авторы пришли к следующим выводам:

1. Значимыми ценностями для студентов всех курсов педагогического университета являются воспитанность и активность.
2. На 1 курсе четко определяется учебная ориентация, включающая такие ценности, как целеустремленность, организованность, квалифицированность, и исключающая такие ценности, как жизнерадостность, независимость, любовь, наличие хороших и верных друзей, развлечения, свобода. По данному показателю профессиональной идентичности на 1 курсе выделяется учебная идентичность.
3. Соотнеся низкие ранги ряда ценностей, отмеченных студентами 4 курса (ЦОЕ) и 5 курса (СЖО) и мнение профессионального сообщества, можно увидеть следующую закономерность: многие указанные ценности важны для профессионала, в частности для педагога, но не значимы для студентов, что говорит о наличии кризисности, возникающей на 4 курсе и ярко проявляющейся на 5. Данный кризис профессиональной идентичности, связанный с показателем «принятие ценностей профессионального сообщества», является кризисом учебно-профессиональной идентичности, ведущим к становлению профессиональной идентичности. Идентификация с группой подразумевает непрерывный процесс сопоставления собственных ценностей с нормами группы. По мнению И. Ю. Дьяконова и М. Л. Бутовской, уход от данной рефлексивной деятельности препятствует вхождению в группу уже на первых этапах этого процесса и

провоцирует возникновение у человека маргинальной идентичности (Дьяконов & Бутовская, 2003).

4. В рамках проведенного нами эмпирического исследования были выявлены общие тенденции изменения профессиональной идентичности по параметру «принятие ценностей профессионального сообщества» у студентов педагогического вуза. Во 2 семестре 1 курса определяется значимость ценностей, связанных с профессиональной деятельностью, но их реализация имеет прежде всего личную направленность, наблюдается приоритет «Я». И всё же студенты 1 года обучения готовы идентифицировать себя с профессиональным сообществом по значимости таких ценностей, как компетентность, самодостаточность. В конце 2 курса обучения студенты выделяют социально значимые ценности, считают, что смогут войти в профессиональное сообщество, обладая такой ценностью как инициативность. На 3 курсе считаются значимыми ценности, характеризующие достаточно пассивную жизненную позицию. Студенты 6 семестра четко не определились с тем, какие ценности должны присутствовать у них, чтобы идентифицироваться с профессиональным сообществом. И только к концу 4 курса выделяются ценности, важные для профессионального развития, в данном случае учебно-профессионального, то есть на данном курсе происходит принятие ценностей профессионального сообщества, но пока еще на учебно-профессиональном уровне, развивается учебно-профессиональная идентичность. К этому периоду обучения студенты готовы идентифицировать себя с профессиональным сообществом по следующим ценностям: ответственность и трудолюбие.
5. Обратим внимание на становление профессиональной идентичности у студентов – выпускников по показателю «принятие ценностей профессионального сообщества». Можно отметить следующие тенденции: ранг ценностей, имеющих профессионально важный характер достаточно низок. Наблюдается следующее распределение рангов (по ЦОЕ): 1 – коммуникабельность, 2 – квалифицированность, 3 – организованность, 4 – ответственность, 5 – целеустремленность, 6 – объективность, 7 – активность, 8 – трудолюбие, 9 – интеллектуальность, 10 – компетентность. Можно отметить, что ценности, необходимые для успешной профессионализации, ставятся студентами – пятикурсниками на последние места, что говорит о кризисе профессионального развития.

В конце 5 курса определились ценности, с которыми идентифицируют себя студенты, имеющие неактивный, зависимый характер. Кризис идентичности по исследуемому параметру скорей всего он связан с тем, что, заканчивая вуз, студенты не видят себя еще педагогами и боятся ответственности. Но они входят в профессиональное сообщество высоко оценивая такое качество, как организованность.

Таким образом, процесс становления профессиональной идентичности сложен. Определяется следующая тенденция развития профессиональной идентичности по показателю «принятие ценностей профессионального сообщества»: переориентация ценностей происходит на 3 курсе и проявляется кризисом идентичности. На 1 и 2 курсах себя с ними, по мнению студентов, должны носить социально активный, самостоятельный, творческий характер. Кроме того, студенты младших курсов более учебно-ориентированы, у них развивается прежде всего учебно-академическая идентичность. После кризиса идентичности в конце 3 курса тенденция меняется, наблюдается динамика в сторону приоритета исполнительских ценностей. Данная тенденция связана с тем, что после прохождения первой педагогической практики на 3 курсе у студентов происходит переосмысление ценностей, необходимых педагогическому профессиональному сообществу. В соответствии с полученным опытом выпускники вырабатывают и реализуют в себе те ценности, которые особенно важны для успешной идентификации с профессией. Становление профессиональной идентичности также продолжается в первый год самостоятельной работы. В данный период интенсивно развивается учебно-профессиональная идентичность.

Для оптимального развития профессиональной идентичности выпускников педагогического вуза следует ускорить процесс формирования у студентов ценностей профессионального педагогического сообщества. Очевидно, что необходима планомерная организация процесса непрерывного образования с использованием всего арсенала средств компетентностного подхода: самостоятельное изучение отдельных проблем, индивидуальные собеседования, консультации, деловые и ролевые игры, тренинги, анализ проблемных ситуаций, проведение дискуссий. При этом основными принципами организации образовательной среды являются: коллективное проектирование и осуществление замысла образовательного взаимодействия; многовариативность содержания образования, способов и форм вхождения в него, вплоть до индивидуальных программ; целостность и преемственность в содержании и логике различных организационных форм; стимулирование и поддержка любой активности и т.д.

Таким образом, в настоящее время перед современной высшей школой стоит задача обеспечения системы образования специалистами, способными на высоком профессиональном уровне выполнять свое предназначение. Проведенный анализ позволил нам обосновать необходимость организации систематического процесса формирования ценностно-смысловых основ у студентов педагогического вуза в контексте профессионального развития и саморазвития в рамках специально разработанных курсов и занятий, способствующих становлению собственного отношения к профессии и к себе как профессионалу.

Summary

World globalization is accompanied by the ignoring of many traditional values, which has a significant impact on the identity of modern citizens.

The category of identity was formed as the most important within the framework of comprehension of modern sociocultural processes. However, despite the abundance of theoretical and empirical research, it is still one of the most complex and theoretically multivalued.

Young people have a number of features and characteristics that allow talking about its hidden opportunities and special ways of forming an identity, including professional ones. Youth as a special socio-age group inherent in the search for the meaning of life, social justice in society; lack of life experience, maximalism in making responsible decisions; socialization among peers. In this regard, the problem of studying the peculiarities of the formation of the value-semantic bases of professional activity among students who have chosen a pedagogical profession in a changing world becomes especially topical.

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STUDENTA PERSONĪBAS BIOPSIHOSOCIĀLĀS ATTĪSTĪBAS PAŠVADĪBAS UN VESELĪBAS PARADUMU MIJSAKARĪBA. TEORĒTISKAIS ASPEKTS

Interrelationship Between Self-Management of Biopsychosocial Development of Student's Personality and Health Habits. Theoretical Aspect

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Abstract. *Until now, there has been done little research on the purposeful biopsychosocial development of student personality in Latvia. Also, in pedagogical science there has been little done on the formation of balanced development self-management skills in humans. Each person's biopsychosocial development is in harmony with its health or lifestyle habits. The quality of student life and studies depends on their health which is affected by health habits. Their formation is closely linked to the formation of biopsychosocial development self-management skills in students. The objective of this paper is to analyse the interrelationship between personality biopsychosocial development self-management skills and health habits in students. The paper discovers the nature of biopsychosocial development skill self-management in relation with the formation of health habits in students. In the analysis of the interrelationship between development self-management skills and health habits there have been found the main factors which affect both skill and habit formation.*
The student biopsychosocial development model has been developed based on American psychiatrist George Engel's theoretical modelling. The principles of balanced biopsychosocial development self-management are based on discoveries in papers on humanpedagogy by Professor A.Spona. The paper looks at the awareness of necessity of student self-development and purposeful self-development in action. The interrelationship between purposeful biopsychosocial development self-management and health habits forms foundation for student attitude formation against themselves, other people, as well as surrounding environment. The results of balanced biopsychosocial development in students manifest together with health habits.
Keywords: *biopsychosocial development, health habits, interrelationship, purposeful development, self-management.*

Ievads
Introduction

Pedagoģiskajos pētījumos sevi attaisnojusi holistiska pieeja cilvēkam. Pedagoģijas zinātne kļūst arvien sarežģītāka līdz ar jaunu, starpdisciplināru pieeju

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izstrādi. Tas nepieciešams, lai labāk iesaistītu integrētu zinātnisko pētījumu procesā dažādas etniskās izcelsmes, reliģijas, vecuma, dzīves uzskatu un fiziskās attīstības cilvēkus. Līdz ar to pētījumu procesā tiek iekļauti arvien jauni, papildinoši modeļi, kas iekļauti interaktīvas mācīšanās procesā un veicina kritisko domāšanu. No tiem īpaši veiksmīgi sevi pierāda Bio, Psiho, Socio modeļi (Engel, 1977), kuru pirmsākums meklējams medicīnas pedagoģijā. Līdz ar jaunu, modernu dzīves apstākļu, elektronisko saziņas ierīču, transporta un komunikācijas iespēju plašo izplatību, medicīnas tehnoloģiju un kvantu fizikas straujo attīstību, arī pedagoģijā rodas iespējas gan plašāk aptvert personas interešu loku, gan detalizētāk izpētīt un iekļaut augstskolas studiju procesā daudzveidīgus personību attīstošus līdzekļus.

Mūsdienās dzīve prasa nobriedušus, spēcīgus un veselus cilvēkus, kas pārvalda savas emocijas un vajadzības, kuru intelekts un jūtu dzīve ir iekšēji saskaņota un sakārtota. "Brīvs cilvēks patstāvīgi izvēlas savus dzīves darbības mērķus, līdzekļus un ir atbildīgs par pieņemtajiem lēmumiem" (A. Špona & M. Vidnere, 2009). Maz cilvēku apzinās, cik būtiska ir psihisko īpašību izkopšana ikviena cilvēka dzīvē, kas kopumā veicinātu viņa garīgo un fizisko veselību. Daudziem dzīve bieži vien liekas kā mīkla, kuru tie neizprot un cilvēki cenšas atrast veidu, kā to vadīt. (Vidnere & Nucho, 2009)

Pirmo reizi Biopsihosociālais (BPS) modelis tika aprakstīts kā alternatīva pastāvošai biomedicīnai. Raksta autors bija amerikāņu psihiatrs Džordžs L. Engels (George L. Engel), kurš 20. g.s. beigās vadīja Ročesteras universitātes medicīnas centru. Viņš uzskatīja, ka visa pastāvošā medicīnas sistēma, kas balstās tikai uz biomedicīnu, atrodas dziļās krīzes stāvoklī. Šāds krīzes stāvoklis ir radies tādēļ, ka sistēma balstās tikai uz medicīnas modeli, vairs nav pielietojama turpmākiem zinātniskiem pētījumiem un sociālai atbildībai pret pacientiem kā medicīnas, tā arī psihiatrijas jomā (Engel, 1977). Tāpēc pievēršama uzmanība personības attīstības un audzināšanas veseluma pieejai personības veselības uzturēšanā un jaunu uzvedības paradumu veidošanā.

Engels arī pievērsa uzmanību faktam, ka veselības pedagoģijā un psiholoģijā lielākā daļa uzmanības līdz šim tika pievērsta galvenokārt fiziskajai veselībai, izmantojot personības izpētes metodes, kas balstās uz bioloģiskiem faktoriem. Kā mūsdienās atzīst Pasaules Veselības organizācijas, tieši psihiskā (garīgā) veselība ir veselību kopumā sargājošs faktors, par kuru medicīnas un pedagoģijas jomu speciālisti rūpējas galvenokārt. Pēc Pasaules Veselības organizācija datiem 60 % pacientiem, kuri apmeklē primārās aprūpes ārstu, ir psihoemocionālo traucējumu diagnoze (WHO, 2006). Tāpēc cilvēka pētījumi veselumā mūsdienās ir īpaši svarīgi.

Zinātniskā darba aktualitāti un inovatīvo aspektu Latvijā nosaka fakts, ka pētījuma ietvaros tiek veikta jauna personības (biopsihosociālo faktoru) mērījuma instrumenta - Biopsihosociālā modeļa aptaujas lingvistiskā adaptācija,

izmantošanai Latvijas kultūrvidē zinātniski pētnieciskiem nolūkiem, kā arī turpmākai praktiskai lietošanai pedagoģijas, medicīnas un psiholoģijas nozaru studijās augstskolās.

Studenta personības attīstība ir saprotama kā nepārtraukts pārvērtību process, mijiedarbība starp bioloģiskajiem, psiholoģiskajiem un vides faktoriem. Šajā procesā indivīdam ir aktīva loma. Viņš var ietekmēt ikvienu no šīs attīstības komponentiem, lai sasniegtu mērķi: ideālu personību ar pozitīvu pašizjūtu un pašrealizāciju savā darba un sociālajā vidē. Īpaši nozīmīga šī holistiskā personības attīstība ir augstāko izglītības iestāžu studentiem, lai viņu studiju dzīves veidojošie parametri un attieksmes nebūtu krasi atšķirīgas no skolas gados apgūtajām vērtībām, jo liela daļa studentu turpina mācīties augstskolās uzreiz pēc vidējās mācību iestādes beigšanas.

Latviešu psihologs M. Vidnere (2011) uzsver personības holistiskās attīstības nepieciešamību ikvienā vecumā. Viņa īpaši izceļ personības dzīves jēgas izkristalizēšanos, kurai pamatā ir psiholoģiskie faktori. Tie ietver personības prasības pēc saskaņas ar dvēseles pamatlikumiem. Psiholoģijas zināšanas palīdz augstskolu studentiem labāk izprast citu zinātņu pamatus un kopsakarības. Līdz ar to tās nodrošina studenta personības holistisko vienotību un novērš iekšējo disonansi, ko rada vienpusīga pieeja savai pašattīstībai. Holistiskā pieeja nodrošina arī veselīgu balansu un novērš studentu attīstības vienpusīgumu eksakto priekšmetu studijās.

Biopsihosociālās attīstības saturs un struktūra
Content and structure of biopsychosocial development

Būtībā ikvienu problēmu, ar kuru nākas sastapties cilvēkam savas dzīves laikā, var aplūkot no trijiem attīstības aspektiem – fiziskā, psihiskā un sociālā. Visas šīs attīstības komponentes veido personības ES koncepciju, taču diemžēl mūsdienās ne vienmēr tiek ņemti vērā visi trīs aspekti veselumā (Katerndahl & Oyiriaru, 2007). Biopsihosociālais modelis tiek veiksmīgi lietots skolās pedagoģiskajā praksē, lai veicinātu bērnu un pusaudžu holistisku attīstību. Angļu izglītības psihploģijas zinātnieks Brāms Norviks (Norwick, 2016) ir veiksmīgi pielietojis biopsihosociālo modeli savā pētījumā par bērnu un jauniešu izglītības problēmām. Holistiskās attīstības process turpinās arī jaunietim nobriestot par pieaugušu cilvēku, kad tiek turpināta izglītība augstskolās. Līdz ar to studentiem var piemērot daudzus pētījumus psiholoģijā par personības holistisku attīstību un pozitīvas pašizjūtas veicināšanu. Amerikāņu zinātnieks Katerndāls ir lietojis un pilnveidojis Biopsihosociālo modeli ambulatoro pacientu aprūpes iestādēs. Tas ir klasificēts kā piemērots instruments adaptēšanai dažādās personu grupās un kolektīvos, lai veicinātu personības integratīvu, līdzsvarotu holistisku attīstību un nodrošinātu pozitīvu pašizjūtu. D. Katerndāls savā pētījumā atzīst, ka

Biopsihosociālā modeļa lietošana ir ieteicama arī turpmākajos pētījumos, lai testētu dzīves iemaņu sekmējošo modeli (Katerndāls, 2007). Tas nodrošinātu arī personības precīzāku pašvērtējumu.

G. Engels uzskata, ka ne visi pielietotie modeļi ir zinātniski. Skatoties plašāk, veselības modelis ir uzskatu sistēma, kas tiek izmantota, lai izskaidrotu dabisko fenomenu, t.i., radīt jēgu tam, kas veselībā ir satraucošs un mulsinošs. Jo vairāk šis fenomens ir individuāli nomācošs vai sociāli graujošs, jo lielāka nepieciešamība izgudrot, attīstīt kādu noteiktu integratīvu sistēmu vai modeli (Engel, 1977).

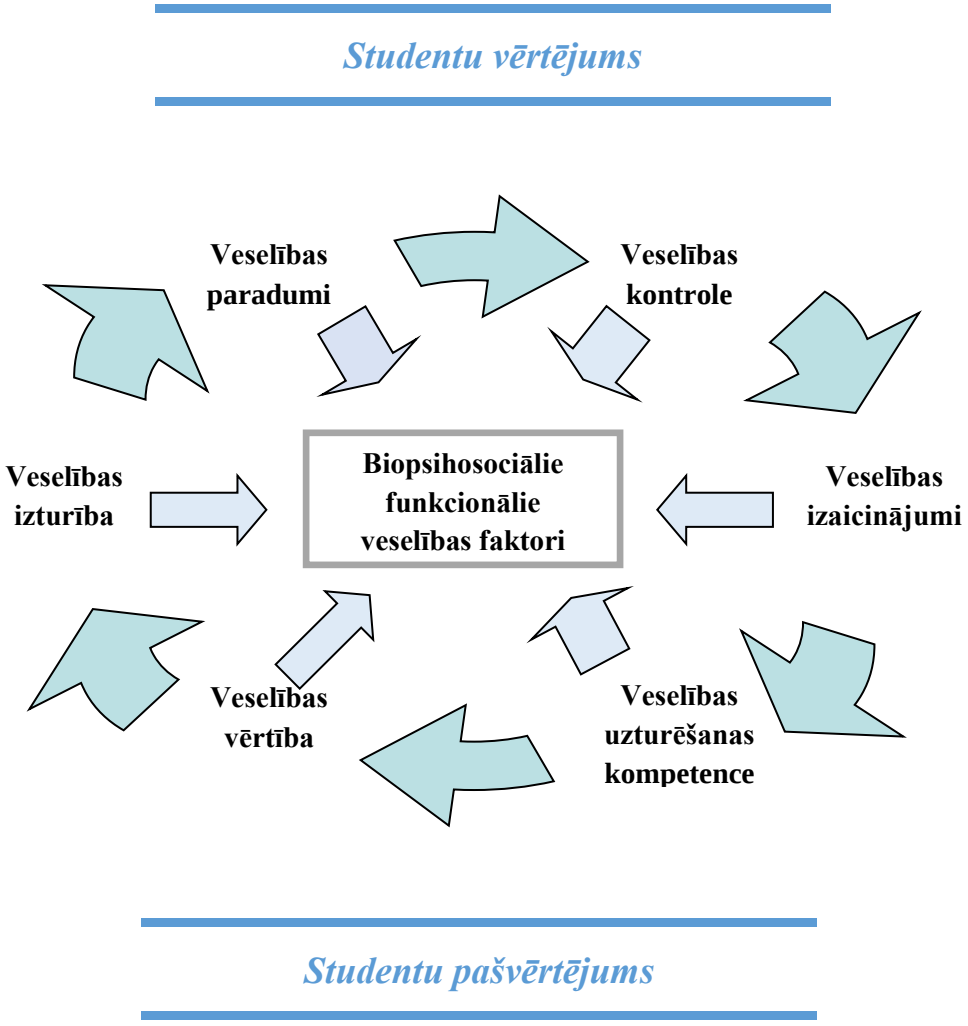
Arī amerikāņu medicīnas profesors Daniels Sulmasi atzīst: mūsdienu medicīnas ārstniecības profesijām būtu uztveramas pacienta vajadzības, kā vienotas integratīvas jeb holistiskas personības vajadzības. Nevainojamai holistiskai ārstniecībai būtu ņemamas vērā visas pacienta personības īpašības - fiziskās, psiholoģiskās un sociālās (Sulmasy, 2002). Tas pats attiecas arī uz pedagoģijas zinātni, kas veicinātu jau agrīnā jaunībā pozitīvu pašpieredzi personības integratīvai attīstībai un atbildību par savas veselības vērtēšanu un pašregulāciju. Robeža starp veselību un slimību ir grūti nosakāma un vienmēr tāda būs, jo to ietekmē kultūras, sociālie, psiholoģiskie un fiziskie faktori. Lai tas būtu izdarāms, nepieciešams pilnveidot paradigmu - veseluma pieeju personības attīstībā pedagoģijā, mijsakarībā ar veselības un uztura paradumu, kā arī ar pašpieredzes veidošanās procesiem, to papildinot ar personīgo atbildību par savu veselību.

Studentu personības attīstībā liela loma ir labu paradumu attīstībai, kam stūrakmenis ir veselīgs dzīvesveids. Vispusīga personība nevar veidoties bez izturīga pamata, kas sastāv no cikliskā pieredzes un pašpieredzes attīstībā izstrādātiem paradumiem. Attieksmju veidošanās pamats ir paradumi un tie uzskatāmi par cilvēka automatizētu darbību. Turpmāk tie nostiprinās sistemātiskos vingrinājumos pieredzes uzkrāšanas procesā, zināšanu un prakses vienotībā. (Špona, 2006).

1. attēlā uzskatāmi parādīts, ka biopsihosociālie veselības faktori ir daļa no studenta kopējiem Biopsihosociālās attīstības faktoriem, kas tieši ietekmē studenta vērtējumu un pašvērtējumu. Tas parāda, ka visi šie faktori ietekmē viens otru un ir nepārtrauktā attīstībā.

Svarīga loma personības biopsihosociālajā attīstibā ir pozitīvas attieksmes veidošanai pret sevi, saviem pienākumiem, sabiedrību, dabu, kultūru. Pedagoģijas zinātniece A. Špona uzskata, ka viena no audzināšanas nozīmīgākajām funkcijām ir – audzināt kulturālu cilvēku. Ar kultūras cilvēka audzināšanu vienmēr mijsakarībā ir cilvēka tapšana par personību, kurš apzinās savu "Es" un kuram ir pašcieņas un pašvērtības attieksme pret sevi un citiem cilvēkiem (Špona, 2006). Šādas attieksmes veidošanā noteicošais faktors ir brīva izvēle, kas raksturo tai sekojošo darbību. Savukārt šīs darbības mērķis ir ideālas personības veidošanās,

kurā piedalās gan pedagogs kā audzinātājs, gan students, kurš ir apguvis pašaudzināšanas prasmes. Ideālai personībai piemīt patiesa cilvēcība un cildena dzīve visās tās izpausmēs. Spēcīgs šīs darbības dzinējspēks ir intereses, kas nodrošina darbības nepārtrauktību un sistemātiskumu. Šī procesa rezultātā tiek sasniegti panākumi, kuri dod stimulu gribas attīstībai, kā arī emocionāli motivē studentu turpmākai darbībai, paralēli izvirzot arvien jaunus ideālus. Attieksmes, kas nostiprinājušās sistemātiskā darbībā un paradumos, veido personības īpašības (Špona & Čamane, 2009). Darbības nozīmīgumu labi atklāj tautas sakāmvārds: "Ko es dzirdu, es aizmirstu; ko es redzu, es atceros; ko es daru, es zinu".



1. att. **Biopsihosociālo veselības faktoru mijsakarības studentu dzīvē**
Fig. 1. ***The interrrelationship of biopsychosocial health factors in the life of students***

Sadarbība starp pedagogu un studentu var dot labus rezultātus tikai tad, ja darbība ir personīgi nozīmīgi pašam studentam. To atspoguļo studenta pašnovērtējums, kas ietver darbības brīvu izvēli, patstāvību un atbildību. Šie principi stimulē tādu studenta personības kvalitāti, kas veicina sabiedrības

humānu ilgtspējīgu attīstību. Pedagoģijas zinātnieks A. Bankovičš uzsver, ka ļoti svarīga ir studentu "iekšējā brīvība plānot laiku mācību uzdevumu veikšanai, gūt pozitīvu pašizjūtu mācīšanās procesā un izjust atbildību par sava darba rezultātu." (A. Bankovičs, 2017: 10.lpp.).

Izdalot no Biopsihosociālā modeļa atsevišķi bioloģisko faktoru, liela nozīme ir cilvēka veselības paradumiem, kas tieši korelē ar personības psiholoģiskajiem un sociālajiem faktoriem. Pareiza uztura, tā daudzuma izvēle, kā arī fiziskās aktivitātes un labi dzīves veida paradumi, kas novērš daudzu slimību rašanos, ir aktuāla medicīnas problēma. Būtiski uzlabojot studentu veselību, pašizjūtu un darba spējas mācību procesā, tiek veicinātas studenta sekmes un attīstības progress, motivējot studentu tālākiem sasniegumiem mācībās un darbā. Veselība ir faktors, kas nodrošina labu pašizjūtu un pozitīvu attieksmi pret darbu, pret līdzcilvēkiem. Pieļautās kļūdas medicīnas jomā, piemēram, nepareiza uztura izvēle slimības gadījumā, noved pie enerģijas izsīkuma, jo organisms enerģiju patērē uztura kļūdu labošanai, lai atgrieztos pie organisma līdzsvara jeb homeostāzes. Ilgstoša novirze no organisma veselības līdzsvara stāvokļa var izraisīt organisma un orgānu disfunkcijas, kas veicina dažādas saslimšanas, kas savukārt negatīvi ietekmē pašizjūtu, koncentrēšanās un domāšanas spējas. Liela nozīme veselības uzturēšanā ir arī fiziskai aktivitātei, atpūtai, režīmam. Fiziskās nodarbības veicina asinsriti, vielu maiņu un visa organisma un orgānu funkcijas un attīstību, savukārt atpūtas un miega laikā noris organisma šūnu pašatjaunošanās procesi (Keeseya & Powleyb, 2005). Tāpēc ir tik svarīgas zināšanas par pareiziem uztura un citiem veselības paradumiem. Savukārt paradumu veidošanās pamatā liela nozīme ir pedagoģijai, jo cilvēkam vajadzīgas zināšanas un izpratne, lai varētu mainīt vai pilnveidot savus paradumus.

Studentu attīstības pašvadība un veselības paradumu veidošanās. Pedagoģiskais aspekts

Self-management of students' development and formation of health habits. Pedagogical aspect

Studenta biopsihosociālās attīstības vadības un veselības paradumu mijsakarība veidojas pamatojoties uz izpratni par atsevišķiem attīstības komponentiem un to izpausmi veselumā. Pareiza komponentu izpratne un interpretācija veicina studenta personības pilnveidošanos. To nodrošina studenta darbības un izvēles nepārtrauktība un mijsakarība.

Izstrādājot piemērotākos veselības paradumus, paaugstinās studentu psiholoģiskās un sociālās dzīves kvalitāte. Tā savukārt stimulē studentu izprast un pieņemt arvien labākus fizisko veselību veicinošus faktorus un iekļaut tos ikdienas dzīvē. Šāda cikliska attīstība un mijiedarbība veicina studenta personības attīstību, optimālu pašizjūtu un pozitīvu attieksmi pret jebkādām dzīves

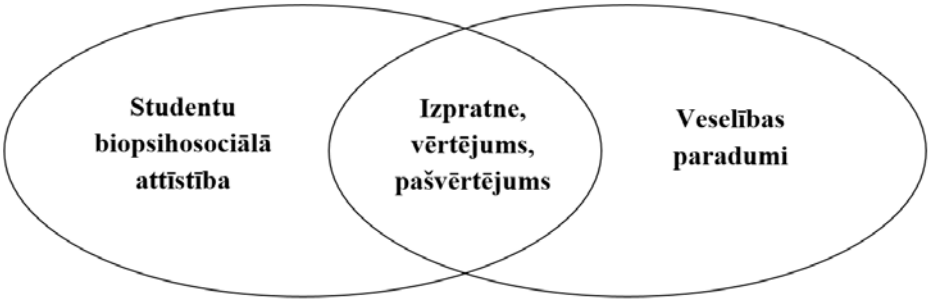
pārmaiņām un līdzcilvēkiem. To var izskaidrot, pamatojoties uz filozofijas atziņām par hermenētisko apli, kas izgaismo izveidoto attīstības modeli un izceļ tā sastāvdaļu attiecības (Vītola, 2014).

Studentu biopsihosociālās attīstības pašvadības un veselības paradumu mijsakarību labi ilustrē hermenētikas principi. Lielu ieguldījumu šai teorijai ir devis vācu filozofs Fridrihs Šleiermahers, ko uzskata par modernās hermenētikas pamatlicēju. Viņš uzskatīja, ka tās mērķis ir "izpratne tās dziļākajā būtībā". Izpratne sākas no autora domām par objektu, kas tiek izteiktas ar valodas palīdzību. Valodas un autora attiecības ir cikliskas. Tās ir ierobežotas ar vēsturisko kontekstu un valodu, bet autors šajā procesā no savas puses nes ieguldījumu objekta izpratnē un valodas attīstībā caur jaunām idejām. Šleiermahers uzskatīja, ka izpratne ir pieredzes māksla, lai piedzīvotu to pašu domu procesu, ko ir pieredzējis autors (F. Šleiermahers, 1978).

Savukārt vācu filozofs Martins Heidegers izvirzīja konceptu par hermenētisko apli, kas attēlo cilvēka ikdienas eksistences pieredzi vienībā ar veseluma vīziju. Tādejādi izpratne attīstās no tās sākotnējiem elementiem, interpretējot ārējos faktorus to sākotnējā veidā.

Vācu filozofs Hanss Georgs Gadamers ir filozofiskās hermenētikas attīstītājs un praktiskās filozofijas pamatlicējs (Gadamer, 2001), kas aptver mūsdienu politiskos un ētiskos jautājumus. Gadamera pieejai ir dialoga raksturs. Viņš bieži savos rakstos lieto sarunvalodas komponentus. Līdz ar to viņš ir viens no nedaudzajiem filozofiem, kuriem "intervija" ir kļuvusi par nozīmīgu filozofijas kategoriju (Gademer & Hahn, 1997).

Gadameram bija ievērojams iespaids uz dažādām jomām, sākot no estētikas līdz jurisprudencei, līdz ar to viņa domas un slēdzieni ir piemēroti arī biopsihosociālās attīstības un veselības paradumu mijsakarības analīzei un izpētei. Viņš uzsver, ka visa izpratnes lietošana ietver sevī orientāciju uz prakses konkrēto situāciju. Pamatojoties uz Gadamera atziņām darbā "Patiesība un metode" (Gadamers, 2004), studentu biopsihosociālās attīstības un veselības paradumu mijsakarību var attēlot ar zīmējumu:



2. att. **Hermenētiskais aplis kā teorētisks pamatojums studentu biopsihosociālajā attīstībā**

Fig. 2. ***Hermeneutic circle as the theoretical foundation in the development of student's biopsychosocial development***

Cilvēka pieredzes veidošanās augstskolu sociālajā vidē ir daudzpusīgs saskarsmes, mācību un audzināšanas mijiedarbības rezultāts. Pieredzes bagātināšanās, pozitīvas attieksmes un intereses veidošanās veicina pašpieredzes attīstību, kas ir pamatā studentu prasmēm un kompetencēm. Tas ir ciklisks process. "Pašpieredze ir dzīvesdarbībā iegūtās un izvērtētās zināšanas, prasmes, attieksmes, kas kļuvušas par personīgi nozīmīgām vērtībām." (Špona, 2006: 151. lpp.) Pašpieredze veicina patstāvību, nodrošina lietu analīzi un veicina atbildīgu lēmumu pieņemšanu. Patstāvība ir cilvēka rakstura īpašība, kas attīstās cilvēkam ar atbildīgu attieksmi un izkoptu gribu. Tā ir atkarīga no cilvēka pašregulācijas prasmes un veido pamatu viņa uzvedībai un rīcībai. Līdz ar to veidojas studenta pašpieredze, kuras pamatā ir izziņas process. Izziņu savukārt nodrošina domāšana, bet izpratne ir indivīda spēja saskatīt jēgu apkārtējās pasaules lietās un parādībās un tās interiorizēt. "No pedagoģiskā aspekta izziņa ir būtiskākā daļa mācību procesā, jo tā cieši saistīta ar holistisko veseluma skatījumu, uz profesionālo izglītošanos caur spēju saskatīt mācīšanās mērķi, pieredzes uzkrāšanu, sistemātisku pašvērtējumu un rezultāta sasniegšanu." (A. Bankovičs, 2017: 8. lpp.).

Pašpieredze nav iedomājama bez sadarbības starp studentu un pedagogu. To nosaka saskarsmes principi, ko uzskatāmi apraksta pedagoģijas zinātniece M. Biseniece, izdalot trīs saskarsmes sastāvdaļas: sociālo percepciju, komunikāciju un interakciju. Sociālā percepcija ir gan saskarsmes partnera fiziskā tēla uztvere, gan priekšstats par viņa nodomiem, spējām, emocijām, darbību un vēlmēm. Sociālā percepcija lielā mērā ir subjektīva, jo tā ir atkarīga no indivīda subjektīvās attieksmes. Komunikācija ir informācijas apmaiņas process, Kas sastāv no verbālās un neverbālās komunikācijas. Savukārt interakcija ir mijiedarbība, kas vērsta uz rīcības regulāciju. (M. Biseniece, 2010).

Saskarsmes procesā, kopīgi veicot kādu darbību vai nododot informāciju, studenti un pedagogi savā starpā ietekmē cits citu, mācās viens no otra. Studenti šādā veidā gūst sociālo pieredzi, kas palīdz sasniegt audzināšanas mērķi: pozitīvas attieksmes un ideālas personības veidošanos. Turpmākajā mācību, audzināšanas un saskarsmes procesā, apgūstot iepriekšējo paaudžu pieredzi, veidojas studenta pašpieredze, kas atklāj personības spējas, intereses un nosaka turpmāko studenta attīstības ceļu.

Studenta personības izpausmes saskarsmē ar citiem cilvēkiem nosaka to, vai viņš tiek pieņemts un novērtēts. Piemēram, students var citiem pastāstīt citiem kādu notikumu vai faktu. Apkārtējo reakcija atklāj, vai viņa stāstījums tiek pozitīvi vai negatīvi novērtēts. Tas savukārt ietekmē studenta pašvērtējumu sociālajā aspektā. Līdzīgi izpaužas studenta vērtējums un pašvērtējums bioloģiskajā un psiholoģiskajā aspektā. Visi šie vērtējumi savstarpēji mijiedarbojas. Ja students saņem labu vērtējumu no citiem cilvēkiem kā atsaucīgs un patīkams sarunu biedrs, ja viņam ir laba veselība un fiziskā izturība, kā arī, ja

viņš ir inteliģents, kulturāls un veiksmīgs savā darbā, tad arī viņa pašvērtējums tuvinās citu cilvēku vērtējumam. Atbilstošs pašvērtējums veicina cilvēkā labāku sevis izpratni un turpmākās darbības mērķtiecību. Savukārt mērķtiecīgs pašvērtējums noved pie paškontroles. Paškontrole ir pamats personības pašregulācijai. (Špona, 2006). Pašvērtējums tiek izprasts kā Es koncepcijas pamatkomponents, kas raksturo gan cilvēka apmierinātību ar sevi kopumā, gan arī ar savām spējām, īpašībām un sekmēm dažādos darbības veidos.

Vācu filozofs Imanuels Kants savos darbos analizē jautājumu "Ko mēs varam zināt?". Viņš apgalvo, ka mēs nevaram izzināt lietas kā tādas, un ka mūsu zināšanas ir pakļautas mūsu pieredzes apstākļiem. Viņš apgalvo, ka mūsu zināšanas ir ierobežotas ar matemātiku un dabiskās empīriskās pasaules zinātni. Kants apgalvo, ka prātam ir aktīva loma, veidojot pieredzi un tas ir ierobežots telpas un laika empīriskajā izpētē.

Kantam ir svarīga loma brīvības izpratnes veidošanā, jo morālā sprieduma iespējamība to pieprasa. Motivācija, kas veicina labu rīcību, ir pozitīvs mērķis. Tādejādi izvēles, intelektuālās izšķiršanās process ir neizbēgams. Spēja izvēlēties principu mūsu darbību vadīšanai piešķir cilvēkam rīcībspēju. Tomēr, cilvēks nav pilnīgi racionāls, tāpēc tas var pakļauties saviem neracionālajiem impulsiem. Pie tam, ja cilvēks pilnīgi tiecas uz savu mērķi, viņš bieži vien nevar zināt, kura darbība ir vislabākā. Attieksme pret darbību ir vērtējama, ņemot vērā tās motivāciju. Kants uzskata, ka vienīgais, kas ir labs bez kvalifikācijas, ir labā griba. (Kants, 2002). Viņš apgalvo, ka drosme, veselība un bagātība var tikt izmantoti sliktiem mērķiem, un tādēļ tā nevar būt patiesi laba. Laime nav patiesi laba, ja tās pamatā nav labā griba. Egoistiski motivēts biznesmenis un dabiski laba persona darbojas vienādi subjektīvi un nejauši. Cilvēka attieksmes vērtība nav atkarīga no viņa dabiskajiem dotumiem, bet no labās gribas.

Kanta atziņas atspoguļojas arī mūsdienu pedagoģijas zinātnieku darbos. A. Špona saka: "Attieksmes var definēt kā integrētu personas īpašību, kas veidojas dzīvesdarbības pieredzes, zināšanu apguves, pārdzīvojuma un gribas piepūles vienībā un izpaužas vērtībās, mērķos, ideālos un normās" (Špona, 2004: 57. lpp).

Cilvēka dzīvē nozīmīga attieksme ir pret savu veselību. Latvijā ir pētīti veselības uzturēšanas modeļi. Piemēram, Ināra Upmale savā darbā "Pieaugušo veselības izglītības darba organizācija un vadība primārās veselības aprūpes māsas praksē" ir konstatējusi, ka "mūsu valstī indivīdiem un sabiedrībai kopumā ir nepietiekama prasme pieņemt veselībai labvēlīgus lēmumus savā ikdienas dzīvē jeb nepietiekama veselības kompetence". Viņa ir noskaidrojusi faktorus, kas ietekmē veselības izglītību. Viņa arī uzsver, ka katra indivīda ikdienas dzīves izvēle vairākos aspektos ir saistīta ar veselību. Viņas izstrādātais modelis palīdz veidot izpratni par veselības kompetences veicināšanas virzieniem. (Upmale, 2013: 179. lpp.) Savukārt Andra Fernāte, sporta pedagoģijas zinātniece, 2008.gada pētījumā "Transdisciplināra pieeja ķermeniskās izpratības izpētē"

lietojusi biopsihosociālo metodi un holistisko pieeju pētījumā par jauniešu izlases sportistu panākumiem. Pētījuma rezultāti pārliecinoši atklāja visu trīs metodes faktoru mijsakarību (Fernāte, 2008).

Lai studentam veicinātu prasmes veidot sevī labākos veselības paradumus studiju laikā, paredzēts adaptēt biopsihosociālo modeli Latvijas augstskolu studentu vidē, kuru lietojot, pilnveidosies studentu biopsihosociālās attīstības interpretācijas prasmes. Šos pieņēmumus skaidro fenomenoloģijas filozofijas pārstāvji, kas atklāj pasaules lietu un parādību izpratni subjektīvā un objektīvā vienībā. Uzkrājot subjektīvu pieredzi, objektīvā vide tiek interpretēta atbilstoši tās likumsakarībām. Tas veicina subjekta izpratni un ir pamats lietu un parādību precīzākai interpretācijai. Šāda modeļa veidošana ir turpmākā pētījuma nozīmīgs uzdevums.

Secinājumi
Conclusions

Jaunā biopsihosociālā vienotības modeļa lietošana augstskolu studentu dzīvē ir pedagoģisks līdzeklis, kas stimulē un atvieglo studenta pašattīstības vadību. Mijsakarība starp veselības paradumiem un studentu pašvadītu dzīves veidu sekmē līdzsvarotu biopsihosocialo attīstību. Teorētiski pamatotais biopsihosociālās līdzsvarotas attīstības modelis tiks turpmāk pārbaudīts empīriskā pētījumā, kā studenti pieņem lēmumus un sasniedz augstākus veselības standartus.

Summary

Theoretical analysis of the interrelationship of the self-management of students' biopsychosocial development and health habits reveals the necessity of holistic approach to the improvement of student's comprehensive development. It is not enough if a student is active in social life, successful in learning, or has good results in sports or other spheres in life. It is important, that all these biopsychosocial factors are working purposefully and shaping independent and mature personality with positive attitude to other people, things and phenomena. Such a personality that doesn't stop with his/her achievements, but always sets new goals on the basis of previous achievements. Therefore positive results are expected in the application of Biopsychosocial model in the high school student environment.

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SOCIETY. INTEGRATION. EDUCATION
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INTERDISCIPLINARY INTEGRATION ON THE BASIS OF THE GEOMETRICAL CONSTITUENT OF THE NATURAL SCIENTIFIC PICTURE OF THE WORLD

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Abstract. *Fragmentariness of the picture of the world in majority modern students is a significant obstacle in the development of their scientific worldview. The lack of integrity of the image of the universe is aggravated by the prevalence of the clip-on thinking among students, which prevents the students from fully acquiring fundamental classical education. The formation of an integral scientific picture of the world is necessary for the realization of an independent productive research activity. In whatever field this activity is carried out, it is closely related to the creation of spatial representations and the mental manipulation of them in the process of solving various problems. Spatial representations are ordered in the mind of the learner on the basis of the geometric component of the natural science picture of the world. Integrated content courses such as "Introduction to the Modern Geometry of the Universe" while teaching of students should be combined with the implementation of the principle of interdisciplinary integration in the development of the educational program, carried out on the basis of the geometric component of the natural-science picture of the world.*
Keywords: *teaching students; interdisciplinary integration; spatial representations; geometrical component of the natural-science picture of the world.*

Introduction

The success of mastering the educational program of the technical, physical-mathematical, natural-science and a number of other areas of preparation chosen by the student of the university depends to a large extent on the level of development of the student's spatial representations. Mental creation of spatial images and operating them in accordance with a particular practical task, with a particular creative idea, is necessary for a person in various fields of professional activity, in productive interaction with the real world. The role of geometry in improving the spatial representations of the learner is extremely important at the same time, both at the stage of schooling, and with conscious mastery of the content of various academic disciplines in the university. An analysis of previously completed dissertation research on the problems of theory and methods of developing students' spatial thinking (Якиманская & Карымова, 2007;

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Гусев & Докшукин, 2012; Подходова, 2017) led to the conclusion that spatial representations of schoolchildren can fully develop only if the interdisciplinary links are realized. In particular, in dissertation of E. A. Ermak (Ермак, 1991) theoretically and experimentally substantiates the fact that spatial representations of high school students can not be effectively developed on the basis of only one, although extremely important for this development subject, as geometry. It is necessary to implement interdisciplinary connections in the training of high school students, and, first of all, the links of geometry with physics, astronomy, geography. A successful form of the implementation of these links are optional items of integrative content, such as "Introduction to the modern geometry of the universe," which allows organically combining Euclidean geometric representations with expediently and "dosed" elements of non-Euclidean geometries on the basis of solving interdisciplinary problems. Of course, the systematization of the spatial representations of university students, the further improvement of their spatial thinking also require interdisciplinary integration in the teaching of students. The revealing of optimal conditions for the implementation of this integration is still a very far from final solution to the problem in the theory and methodology of teaching students. The main research activities during the 7 year were new training tools also neck to be interdisciplinary integration on the basis of the geometrical constituent on the natural scientific picture of the world. Value practical: development of spatial thinking of students in the university.

The main part of the paper

The main objectives of training students in the university are:

1) development of a scientific worldview;
2) a conscious and strong mastery of professional knowledge, skills, competencies – in accordance with the chosen specialty, or – the direction, profile of training;
3) creative development of the personality of each student.

At the same time, first of all, the most important result of the student's education should be his willingness to show confidently, effectively and productively his personal and professional qualities in a rapidly changing modern world. The Information Society equips the student with new powerful means of replicating, distributing, transforming and storing information. On the one hand, it provides its advantages in the field of operating with colossal data sets, and on the other hand it gives rise to illusions about its own cognitive abilities. Actually, a significant part of modern students are not fully aware of the difference

between the concepts of “information” and “knowledge”, “competence”, believing that it is quite enough to remember that “from where you can download” this or that material appropriate to the program of the discipline under study. Unfortunately, at the same time, students do not even have a question about the degree of reliability of the information obtained in this way. Furthermore, this information, not being actively mastered by a student based on his subjective experience and individual features of thinking, imaginative perception of the world, does not become an element of theoretical knowledge, nor a component of the practical competence of this student. The student can only formally reproduce such information, but it's not able to productively use, apply in solving practical problems within the discipline and, especially, at the interdisciplinary level. Consequently, the first of the above goals of teaching students in a university - the development of a scientific worldview - is not achieved. Their thinking in this case is doomed to remain a clip-on, educational-cognitive activity - possessing a low degree of awareness, practical actions-manipulative, situational (in the worst sense of the word). At the same time, one can speak about the fundamental, classical education of a graduate of a university only on the condition that in his mind there is an integral image of the universe, that he has formed a modern scientific picture of the world.

The actual modernization of the system of higher education has already led to the fact that, along with traditional methods, the means and forms of teaching students, the practice of mastering various academic disciplines is increasingly introducing collective ways of realization of educational-cognitive and educational-research activity of students: business and role-playing games with professional content, analysis of a concrete situation (case-study), etc. Participation of students in this kind of activity, of course, has a positive impact on the development of their communicative competence, gives the opportunity to improve their teamwork skills, to show both flexibility in behavior and creativity. But at the same time, knowledge, skills, competencies, student views can re-main fragmentary, disordered. They do not acquire personal meaning for this particular student, and consequently, there are insurmountable difficulties in their application, in the student's independent educational and cognitive and productive research activity on their basis.

In this way, the creation in the university an educational environment in which the intellectual and creative potential of students would be fully revealed, their abilities for independent professional activity would develop, is now a difficult problem. Teachers of various disciplines and the organizers of the educational process in the university are advisable to solve this problem not from case to case, but systematically. They should design joint activities on a scientific basis, carrying out reliable predictions of its results. System-activity approach in

the subject and professional training of students can be a scientific basis, ensuring a high level of effectiveness of these activities.

The system-activity approach in mastering students in academic disciplines requires, in turn, the implementation of the principle of interdisciplinary integration in teaching. This integration can be either predominantly scientific, if, for example, the "Mathematics" profile is trained in the direction of "Pedagogical Education", or, predominantly, artistic, if training is provided for, for example, future designers The conception of artistic integration (Дутцев, 2013) and the revealing of fundamentally new architectural creations in imaginative creations, the practical realization of their integration into the surrounding natural and anthropogenic environment (Vytuleva, 2009) will find in this case the application in the training of students on an interdisciplinary basis. In any case, it is necessary to understand and express the attitude of "man-Universe" with the help of those tools that most correspond to this category of students. Otherwise, the development of the scientific worldview of students will only pass sporadically, and the holistic, harmonious image of the universe will be replaced in their minds by an unordered set of everyday and mythologized notions, mainly stereotyped. At the same time, for the successful self-realization of each student as an individual in a modern, dynamically changing world, an organic combination of figurative and logical components in the composition of their spatial representations is necessary. The consciousness of each student has a unique set of spatial representations, depending on the subjective experience of the student and the individual characteristics of his spatial thinking. Abilities in the field of spatial thinking, as shown in psychology (Yakimanskaya & Karimova, 2007), are identified through special tests. At the same time, the closest is the connection between abilities in the field of creation and mental manipulation with spatial images and abilities for geometric activity, success in solving geo-metrical problems. In turn, according to research in the field of theory and methods of teaching geometry (Ермак, 2003, 2005), the development of spatial thinking of high school students and students of the university can be effectively implemented on the basis of the geometric component of the natural science picture of the world. In the process of teaching, this picture, the most significant features of which are highlighted in this research is a means for ordering and improving the spatial representations of students, independently of the direction and profile of the training, on what specialty is mastered. Anyway, the most important features of the geometric component of the natural-science picture of the world are:

1. The representation of the universal principle of symmetry and its various demonstrations in the structure of the universe.

2. Primary representation about the curvature of space as a difference between its geometric properties and the properties of space expressed by Euclidean geometry.
3. The representation of the closest relationship between space and time.
4. The representation of the curvature of time-space in an alternating gravitational field.
5. The representations of the existence of spaces of dimension different from three, both Euclidean and non-Euclidean.
6. The representations about the use of non-Euclidean geometries in the creation of models of the universe as a whole.
7. The representation of the relativity of any geometric component of the natural scientific picture of the world, its correspondence to the level of cognition of reality and the peculiarities of the language of expression of the results of this cognition at each particular stage of the development of mankind.

Individual features of the student's spatial thinking and the specificity of his spatial representations are taken into account in the learning process due to the fact that the geometric component of the natural scientific picture of the world, along with the invariant “core”, always has a variable “shell” through which interdisciplinary links are realized. In addition, the student should be able to get acquainted with the above-mentioned most essential features of the geometric component of the natural-science picture of the world at the level of mathematical rigor in the presentation of the material, which is more in line with his abilities in the field of spatial thinking. These abilities, as evidenced by the results of psychological research, are largely determined by innate factors. Such persistent characteristics of human spatial thinking, as a type of operating with spatial images, the university teacher should be able to diagnose, in order to take into account further training, and not to try to change it through influence through the content and technology of teaching students. Thus, students who by nature have weak abilities for the mental creation of spatial images and operate them in order to solve various practical or creative tasks, have the first type of operating with spatial images. This category of students can be familiarized with the most essential features of the geometric component of the natural-science picture of the world when implementing the historical-genetic approach in the process of their teaching. Accordingly, the mastering of the material, the implementation of interdisciplinary integration in this case takes place among students at the general cultural level, with minimal use of the mathematical apparatus. Most students (about 70 % of their total number) have an average level of development of spatial thinking and, accordingly, have a second type of operating with spatial images. It is expedient for these students to use an interdisciplinary and practical approach when acquainting themselves with the most essential features of the geometric

component of the natural scientific picture of the world. They can master the material at a figurative and practical level, solving various tasks that require interdisciplinary integration, primarily of a meaningful nature. Such peculiarities of students' training correspond optimally to the implementation of the system-activity approach in mastering the academic disciplines. The importance of the system-activity approach for the formation and development of the scientific worldview of students was mentioned above.

Particular attention should be given to students gifted in the field of spatial thinking, who have a third type of operating with spatial images. But they are, and on the average - every fifth student, find themselves in an unfavorable position, relative to the rest, in conditions conducive to the creative development of the individual, the implementation of professional training, the formation of a modern scientific worldview. So, if we are talking about students of physics and mathematics faculty who are gifted in the field of spatial thinking, these students are able to consider the most essential features of the natural science picture of the world, using a mathematical language, in fact, not different from that used in modern exact and natural sciences. This category of students has already expressed certain scientific interests, which allow implementing various sign-mathematical approaches in mastering the most important features of the geometric component of the natural-science picture of the world. Each of these students requires an individual trajectory in the implementation of interdisciplinary integration in the learning process. For students gifted in the field of spatial thinking, there should be real opportunities for mastering a variety of elective courses, the study of which would enable them to find a worthy practical, creative use in solving the diverse complex problems of their unique personal characteristics and outstanding natural abilities.

Taking into account that, as a rule, relatively little time is spent on classroom activities in the course programs (most often - not more than 72 hours), it is advisable to provide conditions for increasing the level of internal motivation for independent continuation of the student's work on the material that is the basis for the elective course. When mastering the content of the elective course, the student may have original ideas for further independent creative activity, requiring the use of talent in the field of spatial thinking, the mental creation and transformation of geometric representations. As effective means of creating positive motivation and real implementation of interdisciplinary integration, the elective disciplines are used.

Conclusion

Individual features of the student's spatial thinking and the specificity of his spatial representations are taken into account in the learning process due to the fact that the geometric component of the natural scientific picture of the world, along with the invariant “core”, always has a variable “shell” through which interdisciplinary links are realized. Using the developed method (Ermak E., 2013) of developing spatial thinking for over ten years on the Physics and Mathematics Faculty and the Faculty of Educational Technologies and Design of the Pskov State University (participate a training or new education programs up to 500 students), interdisciplinary integration is carried out on the basis of the geometric component of the natural-science picture of the world. The training is conducted in the frame-work of integrated courses and elective courses.

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BUILDING POSITIVE GROUP DYNAMICS IN ENGLISH LANGUAGE TEACHING AT TECHNICAL UNIVERSITY

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Abstract. *This paper is a report on the findings of a study conducted at Samara state technical university, at the faculty of engineering economics. The research is devoted to building positive group dynamics and interactive methods in ELT that are used to provide a positive group atmosphere. The author considers various interpretations of the concept "interactive methods", analyses their effectiveness and develops a specific system of foreign language teaching that is focused on the participation of all students in the speech process and chooses "team-building technology" as a core element of this system and as a type of interactive methods that include complex of games in English. The results of the study prove that implementation of such games efficiently improves language level and builds a positive group dynamics.*
Keywords: *corporate culture, engineering education, foreign language, frame approach, games in English, psychodrama approach, teaching system, "team-building" technology.*

Introduction

Nowadays due to political, economical and social changes that take place in Russian Federation cultural and business interaction with other countries has considerably developed, and as a result, it influenced construction engineering and engineering education in general. Many enterprises and joint-venture companies demand high-technology developments that have commercial value and meet the requirements of overseas customers.

Study of Russian and international requirements to the training of a qualified engineer show that professional competence of an engineer is determined not only by high professional level of knowledge, but also by the ability to interact in a team of specialists (Baidenko, 2007). Consequently, the modernization of education at technical universities becomes urgent. English language teaching plays a great role in this as it increases the competitiveness of graduates by developing certain professional skills of a future specialist. Consequently, the problem of the research is to find the way to develop professional skills of a modern engineer with the help of the English language learning.

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The present research was conducted to find solutions to the following problems:

- to improve knowledge of the English language of Bachelor's students at the faculty of engineering economics by implementation games in English;
- to develop the main professional skill of engineers-managers - team-work skill in the structure of their corporate culture that facilitates building positive group dynamics;
- to design a new integrated discipline that combines management teaching and English language teaching and will serve as a theoretical base for further integrated courses design for Jean Monnet Modules development - Development of Academic Interaction Skills for Research Work in EU Environment in particular.

Much research was conducted, concerning methods of teaching: learning and teaching styles in engineering education (Felder & Silverman, 1988); new teaching approaches in engineering education (Richards & Rogers, 2014); strategies of engineering education were identified (Kashina, 2012). The authors of these papers state that teaching and education at technical university should be interactive, innovative, communicative and that teaching practices should meet the needs of students with the full spectrum of styles.

We believe that the best way to combine various learning styles and to make lessons interactive is to introduce team-building technology into the educational process as a type of interactive education that will help to build a positive group dynamics.

The research was conducted during two-year period time and contained two types of experiment: pilot study and final experiment. 120 students took part in the research.

We used surveys to collect information both at the stage of pilot study and final experiment. These surveys included questions about the understanding of what team-work is, what elements are there in the content of corporate culture that help to organize the team work, how students understand their professional duties and roles. These surveys were collected and compared at different stages of research. Essay was also used as a data-gathering tool.

Sample Selection

We used purposive sampling, studying particular group of students – Bachelor students of engineering economics faculty with the specialization in quality management and control of the construction process. We have chosen this target group, as they were to participate in the project "Entrepreneurs for

Tomorrow" that aims to establish a new Master programme for Sustainable Entrepreneurship in Samara and the Samara region. The students who were going to be involved in this programme in the future at their Masters' should develop essential skills for setting up their own company and work successfully in a number of enterprises. Therefore, the team-building teaching technology, proposed in this paper, will serve as the training background for the chosen target group, preparing them for future educational programs, implemented at Samara state technical university.

Research Instrument and Procedures

120 students took part in the pilot study, carried out at the engineering-economics faculty of Samara state technical university and showed beginner and elementary level of English, which stimulated search of new ways of teaching. Moreover, they were given questionnaires that tested their understanding of corporate culture, importance of teamwork and positive group dynamics in their future carrier. The results showed very poor understanding of professional and work requirements. These drawbacks simulated the research and development of a new teaching system.

The English language lessons were chosen as the background for implementation of the teaching system, as this discipline at technical universities influences the personal and professional potential of students. English language studying, like studying of any other language, develops integrative thinking of an engineer. Students of the faculty of engineering economics do not only master the English language, but also develop professional skills that are necessary in engineering business. "The foreign language lesson is characterized by the formation of creative personality as teaching communication can't take place in spiritless atmosphere" (Kashina, 2007). The atmosphere and communicative approach of this discipline imply the introduction of interactive methods

Interactive methods replaced the communicative methods of education, as they increase the students' motivation, purposefulness and allow to manage a lesson in such a way that all students are involved into English language speaking, their culture of speech is improving, which is so important for their future profession.

It is important to determine the concept 'interactivness'. Nikishina (2013) defines 'interactiveness as 'speech interaction of two or more people'. Obskov (2005) interprets it as 'an enhanced activity in a group of people'. In general, Russian researchers define 'interactiveness' as activity of people. There can be various examples of interactive exercises: 1)think- pair-share; 2) buzz group; 3) case study; 4) asking questions; 5) note review; 6) role-playing; 7) short

writing exercises; 8) demonstration; 9) discussion; 10) brainstorming; 11) debate (between students and Teacher); 12) simulation.

These techniques have multiple benefits: the instructor can easily and quickly assess if students have really mastered the material (and plan to dedicate more time to it, if necessary), and the process of measuring students' understanding in many cases is also practice for the material—often students do not actually learn the material until asked to make use of it in assessments such as these. Finally, the very nature of these assessments drives interactivity and brings several benefits. Students are revived from their passivity of merely listening to a lecture and instead become attentive and engaged. These techniques are often perceived as "fun", yet they are frequently more effective than lectures at enabling student learning.

At the department of linguistics and cross-cultural communication such type of interactive methods as "team-building technology' was used for the first time as the leading method of this study. Before choosing this technique a detailed analysis of scientific literature was conducted, that allowed to reveal the specific features of engineering-economists profession – integrativity of functions both of an economist and engineer, whose main aim is to build positive group dynamics in a team. Engineering business – is the professional sphere of engineers-economists (engineers-managers) which has the following peculiarities: the leading type of activity is managerial, consisting of several stages (planning, realization, control and reflection). Engineer-economist should possess communicative skills in English and ability to perform in a team.

While developing the structure of corporate culture of an engineer-manager it was decided to use the professional roles of an engineer-manager and the communicative skills mentioned above. According to these findings it was assumed that corporate culture of an engineer-manager, that helps to build positive groups dynamics, consists of cognitive, motivational, communicative and reflexive components, thus this notion can be defined as an ability to perform communicative functions in the process of management.

Table 1 **Logics of modeling the corporate culture structure of engineers-managers**

Stages of management	Planning	Realization	Control	Reflection
Roles of engineers - managers	Informator	Motivator	Director	Critic
Corporate culture components	Cognitive	Motivational	Communicative-managerial	Reflexive

The developed system consists of content element which is based on frame approach and is represented by the discipline "Foreign language", and organizational element, based on methodological assumptions of pscychodrama and contextual approaches. The core part of content element is a discipline "Foreign language", aimed at teaching foreign language with the help of frame approach. Frames help students to master professional terminology. The frames that constitute the system are not only lexico-semantical units, but also terminology of certain professional activities context, thus they become part of behavior and professional style.

Organizational element of the system is a combination of games, which are selected on the base of psychodrama and context approaches. These games will help to imitate the professional activity, the professional roles are acted, the professional reality is performed due to the context that resemble the sphere of engineering business. The "team-building technology" includes situations of true-to life communication in the managerial process of engineering-economists. These situation help students to motivate, persuade and support the members of a professional team.

Armstrong (2008) selects the following types of games: 1) battling: games that teach healthy competition; 2) support: activities to appreciate and help each other; 3) teamwork: challenges that require cooperation; 4) creativity: challenges that encourage out of the box thinking.

Concerning the profession of engineers-managers, they should possess various communicative skills at every stage of management. These communicative skills are reflected in the professional roles they play such as: informator, director, motivator and critic. The games that were taken into consideration are aimed at developing each of these roles described.

Table 2 **Games that develop professional roles**

Types of games	**Professional roles**	**Communicative skills**
1. Support: activities to appreciate and help each other	Informator	Inform
2. Battling: games that teach healthy competition	Director	Decision-making in conflict situations
3. Teamwork: challenges that require cooperation	Motivator	Motivation and support
4. Games for stimulating critical thinking (out of the box thinking)	Critics	Distributing the duties and positive criticism

All these skills described in the Table 2 are necessary for building a positive group dynamics that means an engineer-manager should possess

abilities to work in a team. The norms of communication are one of the main elements of corporate culture.

The analysis of corporate culture theories (Harrison, Price, Gavin, & Florey, 2002), consideration of concepts “culture”, “corporate culture of an organization”, “corporate culture of a person” has allowed to conclude that the basic component of these notions is communication as the instrument of corporate culture formation. Corporate culture helps the specialist who is involved in management to work effectively, to share information among all the members of the team in engineering business.

Examples of Team-building Activities Used in the Experiments

Feel the word

Write twenty words beginning with A on the flipchart. Choose a word you like and put it in the sentence. Find the average number of syllables in a word. Categorize the words according to your own criteria. Choose three words and put them in a poem or a song (groups of four). Repeat a word in your head. Find its weight, color, temperature, texture, smell, taste. Look at the flipchart silently then put it away. Now replicate five of the words and ask others to rebuild the whole word picture. Close your eyes and reflect on all the exercises. Discuss each of the exercises. Which of them did you find the most and the least motivating personally?

Vanishing stories

The greedy mayor and the bloated alderman refused to pay the Pied-Piper the gold they have promised him for luring the rats of Hamlin into the fast-flowing river, which makes him so angry that he leads away the children of the city and they vanish forever into the mountainside.

Task: 1) You may take one word out. 2) You may take two consecutive words out. 3) You may take three consecutive words. 4) You must not add anything. 5) You must not change or modify any words. 6) You must not move any words. 7) You may delete, change, or add punctuation as needed. 8) After each deletion the student who has proposed it must read the remaining sentence aloud: this must be grammatically correct and must have a meaning, though the meaning will change as the exercise progresses.

Data Analysis

The initial experiment showed that students of engineering-economics faculty don’t possess corporate culture (120 students answered the questionnaire) and the level of English is very poor. This situation required development of a teaching system that included games and activities. They were

used during the whole semester (4 months).

Games that are selected according to the principles of psychodrama and context approaches enabled the formation of corporate culture components. Activities to appreciate and help each other enable the formation of cognitive component as students obtain knowledge of psychological peculiarities of a person in management. Games that teach healthy competition formed communicative component of corporate culture as the skill of emotional support is formed. Challenges that require cooperation form the motivational component, certain management style is formed. Games for stimulating critical thinking (out of the box thinking) form the reflexive component.

Table 3 **Comparative analysis of corporate culture formation at different stages of experiment (% index)**

Corporate culture components	**Initial experiment**	**Final experiment**
Cognitive	10,0	82,0
Motivational	51,0	79,0
Communicative	25,0	91,0
Reflexive	25,0	83,0

For more detailed analysis of results of corporate culture formation interrelation of these indexes was identified with the help of correlation analysis. The final experiment showed very strong interrelation between all the components (both initial and final experiment indexes compared): cognitive and motivational (before r=0,673, after r=0,766); communicative and reflexive (before r=0,506, after r=0,710); motivational and reflexive (before r=0,401, after r=0,651).

Conclusions

This two-years study was very important for the department of linguistics, cross cultural communication and Russian as a foreign language as the implementation of the above mentioned role games helped to achieve certain results: developed students' awareness of the importance of the English language in their future profession, which was evident in their essay writing after finishing the course; intensive practice of basic management and engineering vocabulary, as the students' learnt how to make instructions in English and studied strategies of compromise and group decision making; developed communicative abilities, as these interactive activities boosted motivation through fascinating speaking activities and intensive team work.

In general, these findings can be beneficial for teaching not only engineers-managers, but also students of other technical specializations and can be used for designing a new interdisciplinary discipline "Professional English for Engineers Managers" and prepare students' for Master programme.

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LEARNING ACHIEVEMENT IN STEM SUBJECT: COMMONALITIES AND DIFFERENCES IN LATVIA AND FINLAND A COMPARATIVE STUDY

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Abstract. *Education is a never ending learning process. Learning achievement in STEM is the academic disciplines of science technology engineering and mathematics. This article reports a study on the impact of learning achievement in STEM subject in Latvia and Finland. This report bring collection of knowledge and information from other writers and OECD. Learning achievement is the result of an activity that has been done, created both individually and in groups- education. Active learning increases student performance in STEM subjects (Science, Technologies, Engineering, and Mathematics). The basic qualification for school teachers in Finland is the master´s degree and in Latvia the basic or minimum qualification for teaching needed to have at least bachelors' degree and teaching certificate. Research evidence shows that performance in Latvia was slightly below the OECD average in STEM subjects.*
The impact of socio-economic factors as student's performance must be taken into account with comparative studies both in Finland and Latvia, and how Latvia and Finlandachieve their expected goals?
The theoretical study is trying to investigate the reasons of differences in learning achievement in Latvian and Finnish schools; also what influences learners success and achievement in mathematics and science. It is important from a pedagogical point of view to provide student with relevant practical and theoretical information and to promote their knowledge.
Keywords: *stem subjects, learning achievement, education, performance.*

Introduction

Teaching is interactive in a way that observes students' existing conceptions. Teaching is about facilitating students' learning: Students are encouraged to construct their own knowledge and understanding and to strive towards becoming an independent learner. A student – centered teacher tries to recognize students' differing needs and take these as the starting point, when planning the course (Biggs, 1999; Kember & Kwan, 2002; Prosser & Trigwell, 1999; Prosser, Trigwell & Taylor, 1994; Samuelowicz & Bain, 1992, 2001; Trigwell & Prosser, 1996b; Vermut & Verloop, 1999). Teachers' approaches to teaching are influenced by their conceptions of teaching. Studies of University teachers'

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conceptions of teaching have showed a range of variation (Kember & Kwan, 2002; Prosser, Trigwell & Taylor, 1994; Samuelowicz & Bain, 1992). Many countries, such as a Norway, UK, and Sri Lanka have made decisions about the compulsory pedagogical training of University teachers (Gibbs & Coffey, 2004).

Teaching and learning are not two distinct phenomena. Approaches to teaching are shown to be related to students' learning approaches and subsequently to their learning outcomes. If a teacher's focus is on what he or she does or on transmitting knowledge, students are more likely to adopt a surface approach to learning and focus on the production of knowledge. If a teacher adopt a deep approach to learning and focus on deeper understanding of the phenomena they are studying (Entwisted, Skinner, Entwistle, & Orr, 2000; Trigwell, Prosser, &Waterhouse, 1999).

Research evidence shows that making further improvements in teaching and learning- e.g. towards the government aims to reduce the proportion of low achievers and increase the proportions of top performers by 2020- it will require additional investments in continuous teachers' professional development. Considering the long service of many Latvian teachers, many of whom completed initial teacher training more than twenty years ago, this is particular relevant (OECD, 2013b). Teacher qualification in Latvia equals those of OECD countries as teachers at all levels are required to have a tertiary degree (equivalent to ISCED Level 5A and 5B) to obtain the right to teach. While some OECD countries like Estonia, Finland, Korea, Norwayand Sweden apply selective criteria to enter pre-service training (forpublic primary and secondary education) others like Belgium, Germany, Luxembourg, the Netherlands and Poland have none (OECD, 2014b) Latvia belongs to the latter category.

Teacher's motivational aspect and teaching methods in Latvia and Finland

Teachers are an essential resource for learning. An education system cannot exceed the quality of its teachers (Barber & Mourshed, 2007). Trigwell, Ashwin, Lindblom-Ylänne, and Nevgi (2004) have investigated relations between approaches to teaching and motivational aspects in teaching. They have reinterpreted ideas of motivation in a way that fits into this perspective. They see that the aspects of teachers´ motivation and interest which are evoked will be related to their perception of the situation they are in. They see motivation as an integral part of teacher'sawareness, which can change according to their perception of the situation.

According to Banduras´definition self-efficacy as "generative capability in which cognitive, social, emotional, and behavioral sub skills must be organized and effectively orchestrated to serve innumerable purposes". Perceived

self-efficacy is a belief that one can perform using one's skills and abilities adequately in a certain circumstances (Bandura, 2000: 36-37). If approaches to teaching reflect what teachers understand teaching to be, motivational aspects of teaching, such as self-efficacy beliefs, do not seem to incorporate particular views on the purpose of teaching. Self-efficacy is about teachers' beliefs regarding their ability to perform their academic tasks (Lindblom-Ylänne & Nevgi, 2003; Trigwell et al.; 2004). Gordon & Debus (2002) have shown that teachers with high self-efficacy beliefs are likely to engage in a wide range of more productive teaching practices than teachers with low self-efficacy.

Teachers in Finland are very independent. They can decide almost everything: how they will teach, what they will select from the basic (national) curriculum, when they will teach each particular topic. The fact that that teachers have so much independence and respect influence young people as they are deciding what program they will follow in the University. If they choose teacher education, they know they will be entering a profession that enjoys broad trust and respect in the society one that plays an important role in shaping the country's future (OECD, 2010). The focus of education is on learning rather than testing. There are no national tests for pupils in basic education in Finland. Instead, teachers are responsible for assessment in their respective subjects on the basis of the objectives included in the curriculum (Mikkola, 2000).The Finnish education system has received international recognition in recent years. A study of Finnish elementary and secondary teacher's beliefs identified two types of mathematics teachers, traditional and innovative teachers. The traditional teacher emphasizes student thinking and deeper learning (Kupari, 1996).

A master's degree has become an essential precondition to raising the status of the profession in some high-performing countries. This ensures that the workforce possesses the knowledge and skills to drive school improvement efforts forward. Finland for example, has distinguished itself as high performers, and all teachers obtain a Master's degrees based on research and practice (Barber & Mourshed, 2007). Where teaching is seen as an attractive profession, its status can further be enhanced through selective recruitment that makes teachers feel that they are embarking on a career sought after by high-fliers (Schleicher, 2011).

The education system in Latvia is highly decentralized. Fewer teachers in Latvia think that their profession is valued in society, and a smaller proportion would become teachers if they could decide again (OECD, 2017). The Latvian government has defined a member of education objectives, including improving the motivation and professional capacity of teachers and academic personal. Teachers are at the centre of reform efforts for good reason. Although many external factors impact student learning and achievement, the single best predictor of student learning and achievement within the school in the quality of the teacher. The Latvian government recognizes its education system will only improve if it

can attract quality teachers into the profession, and maintain them by paying fair wages and investing in their professional development. (Teacher Remuneration in Latvia: An OECD perspective).

Since regaining independence in 1991 Latvia have gone through many changes that have also affected the educational system. While natural sciences and mathematics had been emphasized in the Soviet curriculum and in the society at large (Stoloff, 1989), the focus has since then shifted towards other topics. Although the teachers' beliefs in Latvia are oriented towards constructivism both primary and secondary teachers put the teacher in the center of educational experience when reporting on their classroom practice. While both primary and secondary teachers in their beliefs and practice support the similar hierarchy of constructivist elements, primary teachers are more attuned to reporting the implementation of elements of constructivism in their classroom than secondary teachers (Pipere, 2005). In 2006 and 2008 new standards in basic and secondary education were introduced in Latvia.

Educational performances in Latvia and Finland

In PISA 2015, learners' performance in Latvia was slightly below the OECD average in mathematics and reading and close to the OECD average in science, although performance in science decreased between 2012 and 2015. The impact of socio-economic factors on students' performance was below the OECD average. In Latvia education is compulsory from age 5 to age 16 (including pre-school for 5-6 years old). Early childhood education and care (ECEC) starts at age 1, 5, and enrolment rates for 4-year-olds were above the OECD average in 2014 (90 %, compared to OECD average of 86 %). At upper secondary level, attainment rates are comparatively high, but enrolment and graduation rates for vocational education are below the OECD average. Tertiary education attainment rates for 25-34 year –olds are around the OECD average (Education Policy Outlook:Latvia@OECD 2017). In comparison to the OECD countries' average results of Latvian students have been statistically significantly better at solving 12, but less successful- at solving 27 out of 109 mathematics items included in PISA 2012. In the remaining 70 items the results of Latvian students correspond to the average level achieved by the students of OECD countries.

In Latvia the average performance in reading of 15- year olds in 488 points, compared to an average of 493 points in OECD countries. Girls perform better than boys with statistically significant differences of 42 points (OECD average: 27 points higher for girls). In science literacy, the main topic of PISA 2015, 15-year olds in Latvia score 490 points compared to an average of 493 points in OECD countries. Girls perform better than boys with a statistically significant

difference of 11 points (OECD average: 3.5 points higher for boys). On average 15 year – olds score 482 points in mathematics compared to an average of 490 points in OECD countries. Girls performed better than boys with a none statistically significant differences of 2 points (OECD) average: 8 points higher for boys).

Assessment in Finnish schools comes strictly from their teachers. The decentralized nature of Finnish schools allows for this. Primary schools do not use testing in order to concentrate on teaching, which allows for flexibility in curriculum design for teachers (Sahlberg, 2007: 56). After fifth grade, the law prohibits numerical grading in order to prevent student competition (ibid; p. 155). This lack of testing may relate to Finnish success in PISA. The Finnish National PISA Report cited that 7 % of Finnish students felt anxiety when working on mathematics at home, compared to 52 % of Japanese students and 53 % of French students (ibid, p. 156) each student receive report once a year, and teachers may administer an additional report halfway through the year (Finnish National Board of Education, n.d 8). At the end of compulsory school, students receive a certificate of completion (ibid).

International education surveys have placed the spotlight on countries with educational performance. PISA especially, with only three rounds thus far, has had a huge impact in the educational world. Finland traditionally not an avid participant in IEA studies has attracted much attention due to its performance in PISA. The top performance of Finland in all three administrations of PISA, and on all assessed literacy areas, has given the country new status as a global leader in education. The quality of education and consistency across the PISA surveys in Finland coupled with its high performance make the country even more alluring to those seeking educational models. In other words, Finland's performance in PISA has created an educational frenzy manifest in considerable attraction to the Finnish educational system (Phillips & Ochs, 2004: 773).

In Latvia all teachers need to be qualified to work in a school and must complete study programmes leading not only to higher pedagogical education, but also to teacher qualification at the respective level of education. Most of these programmes prepare teachers for teaching in particular subjects completion of a given programmed entitles graduates to teach the subject at the respective level of education. Exemptions exist for early childhood teachers and primary school teachers (classes 1-4) who also receive a teacher qualification for the respective level of education but are entitled to teach most subjects, i.e. they are generalists (Eurypedia, 2014).

A teacher needs a critical mind and ability to reflect. Reflection can be an action and on action (Niemi & Jakky-Sihvonen, 2009). For example, in the teacher education in Finland teachers' competence must include the readiness to analyze the situation like a researcher and to make conclusions and decisions to act or to

change something in a given situation (Niemi & Jakky-Sihvonen, 2009) consequently, when new teacher learning models are developed in Latvia it has to be taken into account that teachers' education has never met such demands and most teachers lack appropriate learning experience. Teaching must be made a more attractive profession: OECD evidence suggests that one of the most powerful success factors in education is attracting quality graduates. While this is not only a matter of the salary, remuneration does matter. Latvia pays teachers less than other European countries. We believe that any new system of teacher pay will require basic salaries to increase in real terms. In Latvia, the profession is more feminized than in OECD countries; improving the image of teaching for both women and men would permit a more positive and balanced view of the profession (Kelleher, 2011).

According to Van Driel et al. (2001) practical theories that guide teachers in teaching are based on practical knowledge. Teachers' practical knowledge is constructed by the teachers in the context of their work integrating experimental knowledge and formal knowledge. Math and science teachers' formal knowledge can be describe as follows "chemists know the chemistry content, however they lack the knowledge of how to merge the content with high level pedagogic outcomes" (Ege et al., 1997). This is obvious examining the scope of mathematics teachers' study program content for mastering the subject content, knowledge about students, teaching and learning, instruction and assessment techniques classroom management etc., in other words, the launching pad to become a teacher.

According to European Commission (OECD, 2016) in recent years, Latvia has made remarkable progress in reducing its early school leaving rate and improving basic skills attainment. Latvia is gradually introducing a new financing model in the higher education system, with elements to reward quality. In Latvia the tertiary educational attainment rate in high, but supplying graduates to knowledge-intensive sectors and attracting international students remain a challenge. The gender gap in education is a challenge across the board, with women outperforming men significantly both in terms of qualifications and basic skill proficiency.

Finland continues a comprehensive curriculum reform to modernize school education. The aim of the curriculum reform is to modernize teaching and learning through new pedagogies, a new learning environment as well as a new school culture. The national core curriculum for pre-primary and basic education was renewed in 2014, and involved all stakeholders, particularly education providers and educational personnel and for general upper secondary schools was renewed in 2015. The national core curriculum provides strategic guidance for developing local curricula that determine the exact education context. Finland, local curricula

are based on a core curriculum that was updated under the wider curriculum reform in general education adopted in December 2014.

Conclusion

Finland has a rather homogeneous and distinctive culture of its own. Latvia has more marked differences in culture, which have their roots in Latvia's modern history. The Latvian government recognizes its education system will only improve if it can attract quality teachers into the profession and paying good salaries and investing more for professional development. Latvia is young independent country and has gone through many changes, including educational system. Since active social participation in STEM education is crucial in the process of education and achievement. The activity of learning requires social and cultural recognition and thus the goals of the pedagogical process have to be relative to the social and cultural process. Supervision of the teachers needs to be continues, by the school, school teacher and regional education inspectors. Given training and instruction for inspectors, would improve teachers' performance and standard. Teacher's motivation and accountability is the key instrument for good committed teaching. The teacher's role is changing alone with the new learning situations and environments of the modern era.

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SOCIETY. INTEGRATION. EDUCATION
Proceedings of the International Scientific Conference. Volume I, May 25th-26th, 2018. 103-112

МЕТОДЫ ИЗУЧЕНИЯ КУРСА «БИОФИЗИКА» В УНИВЕРСИТЕТЕ

Teaching Methods in the University Course "Biophysics"

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Abstract. *The article presents some methods and results of experimental teaching biophysics at Pskov State University (Russian Federation). The goal of any university is to train highly qualified specialists. To achieve this aim, the authors suggest following interdisciplinary approach to the educational process. Some topics of the lecture presentations, video clips and demonstration educational experiments as well as examples of computer modelling of biophysical processes are considered. Subjects of the real and virtual biophysical, biological and medical experimental tasks for students working in an educational university physical laboratory are discussed.*
Keywords: *biophysics, educational university physical laboratory, teaching students.*

Введение
Introduction

В современной медицине широко применяются физические и физико-химические методы исследования биологических объектов. Качественное медицинское образование должно быть фундаментальным. На наш взгляд, повышение уровня фундаментальности медицинского образования должно быть связано не только с преподаванием биофизики на высоком научном уровне, но и с хорошей оснащенностью современным медицинским оборудованием физических лабораторий. При этом в основу преподавания должны быть положены хорошо известные дидактические принципы педагогики и методики обучения студентов естественным наукам – систематичность и последовательность изложения учебного материала, наглядность и доступность, интеграция наук и распространение

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межпредметных связей в процесс образования на всех его ступенях, требования к проведению учебного эксперимента и др.

Цель данной статьи – познакомить читателей с опытом преподавания биологической и медицинской физики студентам Псковского государственного университета (Российская Федерация), обучающимся по направлению подготовки «Медицинская кибернетика».

В ходе работы был проведен анализ научно-методической литературы по проблеме исследования, на практике реализован междисциплинарный подход к методике обучения биофизике студентов университета.

Опыт организации и проведения университетского курса биофизики
Experience of the biophysics university course organization and realization

В 2013 году в Псковском государственном университете было открыто новое направление подготовки специалистов «Медицинская кибернетика». Одним из видов профессиональной деятельности выпускников является медицинская деятельность, в частности, они должны быть готовы к диагностике заболеваний и патологических состояний пациентов, а также способствовать профилактике возникновения заболеваний и укреплению здоровья.

Преподавание курса физики на данном направлении подготовки ведется в течение 6 семестров. Преподавание биологической и медицинской физики начинается на третьем курсе, когда изучен почти весь курс общей физики. Дисциплина «Общая биофизика» изучается в течение 160 аудиторных часов, которые включают 60 часов лекционных, 36 часов практических и 64 часа лабораторных занятий. По дисциплине «Медицинская биофизика» на лекции приходится 16 часов, на лабораторные занятия – 32 часа.

Рабочие программы дисциплин по общей и медицинской биофизике предусматривают решение в процессе преподавания следующих задач:

- формирование у студентов системных знаний и умений в области основных закономерностей и механизмов биофизических процессов и явлений в тканях, органах и их системах в процессе их функционирования; рассмотрение физических особенностей строения разных видов тканей организма (нервных, мышечных, скелетных и пр.);
- физическое истолкование функциональных явлений биомеханики, биореологии, биоэнергетики;
- теоретическое обоснование построения и использования специализированного оборудования для функциональной

диагностики и терапии, а также приобретение студентами умений использования оборудования для выполнения физических экспериментов медико-биологического назначения;

- ознакомление студентов с методологией биофизических исследований.

Решению этих задач способствуют мультимедийные курсы лекций, занятия в диалоговом режиме, выполнение лабораторных работ.

Практические занятия по курсу общей биофизики направлены на объяснение физических процессов, происходящих в биологическом организме человека. Студенты рассматривают вопросы, касающиеся кинетики биологических процессов, биофизики мембран, рецепции, фотобиологических процессов, термодинамики биологических процессов, изучают основы и механизмы радиационного поражения клетки и организма в целом; возможные способы защиты от радиационного воздействия.

Физика – наука экспериментальная, поэтому трудно добиться глубокого понимания предмета без выполнения лабораторных работ и проведения практикумов. Лабораторные работы являются одним из основных видов практических занятий со студентами. Они представляют собой средство приобретения студентами конкретных умений и навыков работы с лабораторным и медицинским оборудованием, использованием математических моделей физиологических систем для исследования свойств и поведения соответствующих систем в организме человека.

Лабораторные работы позволяют студенту под руководством преподавателя расширить и детализировать полученные знания, выработать и закрепить навыки их использования в профессиональной деятельности. Подготовка к лабораторным занятиям предполагает также предварительную самостоятельную работу студентов, выстраиваемую в соответствии с методическими рекомендациями преподавателя.

Лабораторные занятия формируют у студента навыки межличностного общения и работы в коллективе, исполнительские качества, мотивацию к профессиональному и личностному росту, интерес к профессии и потребность в непрерывном повышении квалификации.

Самостоятельная работа в процессе подготовки к лабораторным занятиям формирует системность мышления, волевые качества, повышает познавательный интерес. Использование такой формы занятий, как лабораторный практикум, позволяет развивать у студентов умение анализировать полученные экспериментальные результаты, делать выводы и обобщения, применять теоретические знания на практике.

На основе анализа лабораторных практикумов по биофизике (Антонов et al., 2001; Блохина et al., 2002; Демина et al., 2006; Добро & Богатов, 2009)

и имеющегося физического оборудования нами были разработаны описания 14 лабораторных работ по общей биофизике и 8 лабораторных работ по медицинской биофизике.

При преподавании курсов общей физики и биофизики авторы придерживаются принципов систематичности, преемственности, последовательности изложения учебного материала, наглядности и доступности.

Лабораторные работы по дисциплине «Общая биофизика» в первую очередь направлены на знакомство с приборами и методами определения физических величин. Так, например, студенты учатся определять коэффициент вязкого трения жидкости, характеризующий особенности течения крови по сосудам, кровоснабжение органов. Работая с сахариметром и рефрактометром Аббе, студенты учатся определять концентрацию оптически активного вещества (сахара) в растворе, изучают особенности процессов распространения света в оптических волокнах – световодах, широко использующихся в медицине для обследования полостных органов тела человека.

Основы аудиометрии изучаются при работе со звуковым генератором. Определение размеров и концентрации эритроцитов лягушки и человека осуществляется двумя способами: с использованием биологического микроскопа и лазерной установки. Исследование спектра поглощения растворов осуществляется с помощью абсорбциометра-нефелометра. При выполнении лабораторных работ с радиоактивными элементами студенты изучают результаты воздействия источников ионизирующих излучений на биологические объекты, методы защиты от радиоактивных источников. При выполнении лабораторной работы по геометрической оптике студенты знакомятся с устройством человеческого глаза как оптической системы, с такими понятиями, как расстояние наилучшего зрения, аккомодация, близорукость, дальнозоркость.

Важную роль в жизнедеятельности животных и растений играет осмос. Обмен веществ в организме осуществляется посредством соков и крови – растворов, омывающих полупроницаемые перегородки растительных и животных клеток. В лабораторной работе «Определение осмотического давления» студенты готовят изотонические, гипертонические, гипотонические растворы, изучают процессы, происходящие в них.

При изучении биофизики используются разные виды моделей, которые помогают глубже понять внутренний механизм явления. С этой целью студенты выполняют виртуальные лабораторные работы. В основе работы нервной системы лежит перераспределение электрических зарядов в мембранах нервных клеток. В виртуальной лабораторной работе

«Моделирование калий - натриевого насоса» (Васильев, 2016) студенты исследуют, как электрические заряды перемещаются в нервных клетках, как меняется электрический потенциал на мембране, как параметры мембраны влияют на распространение нервного импульса (рисунок 1). Виртуальная лабораторная работа «Моделирование кровотока» (Харьков, 2016) позволит понять, как проходит процесс артериального кровообращения и изучить факторы, которые влияют на работу кровеносной системы в модели одного эластичного сосуда Франка и модели Ростона двух резервуаров с различными эластичностями и неупругими звеньями разного гидравлического сопротивления между резервуарами.

Лабораторные работы по дисциплине «Медицинская биофизика» предполагают знакомство студентов с биофизическими методами в диагностике и терапии заболеваний. Студенты изучают физические основы ультразвуковой диагностики, спирометрию (метод определения жизненной емкости легких и составляющих ее объемов воздуха), основы концентрационной фотоколориметрии (находят концентрации различных веществ и скорость изменения оптической плотности); определяют параметры импульсных сигналов, используемых для электростимуляции органов и тканей, исследуют импеданс биологической ткани (в широком диапазоне частот от 0 до 1 МГц), измерение которого используется в трансплантационной хирургии, при биометрическом анализе тела человека, проводят комплексный анализ растворов по величине водородного показателя (pH).

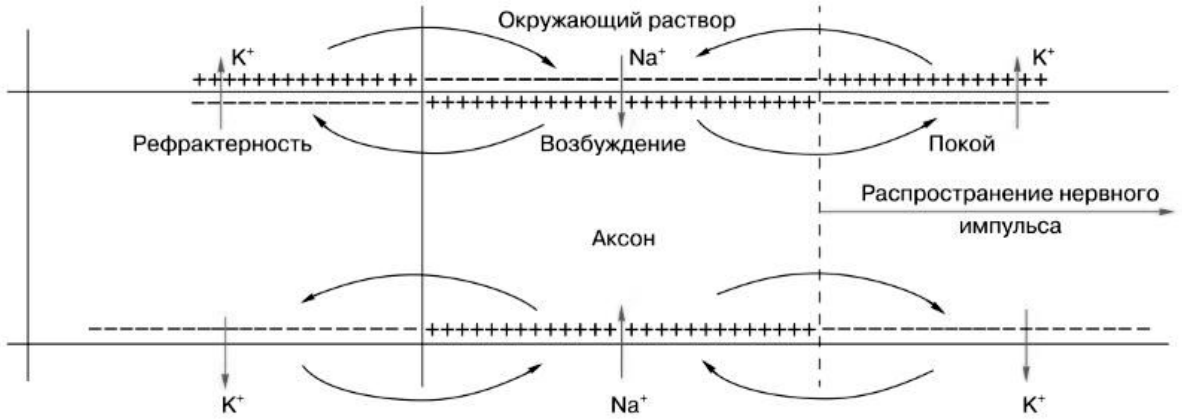
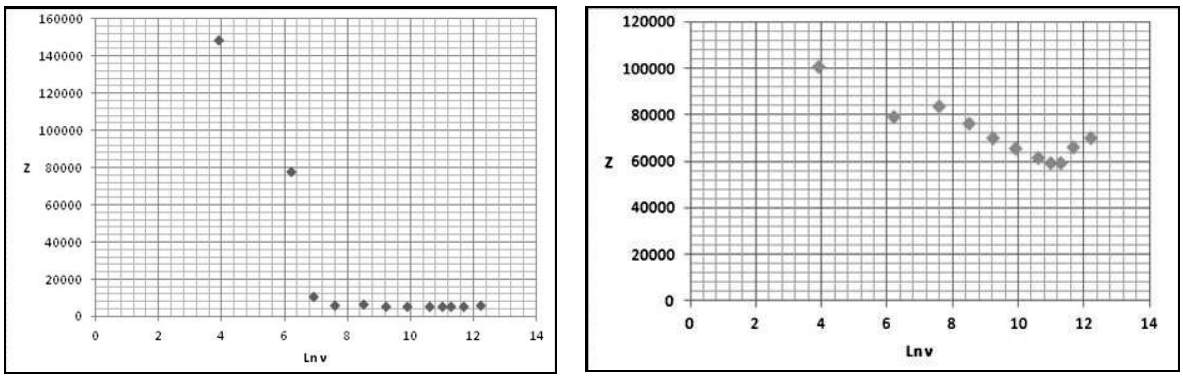


Рисунок 1. **Схема распространения волны возбуждения**
Figure 1. ***Scheme of the excitation wave propagation***



а ***б***

Рисунок 2. **Частотные зависимости импеданса Z здоровой (*а*) и поврежденной (*б*) биологических тканей руки человека в полулогарифмическом масштабе**
Figure 2. ***Frequency dependences of the healthy (a) and damaged (b) human hand tissue impedance Z in semilogarithmic scale***

Мы согласны с мнением авторов (Копосов & Тарасова, 2010), что повышение уровня фундаментальности и профессиональной компетентности студентов при преподавании физики должно осуществляться, в частности, через рассмотрение физических методов исследования человека и других биологических объектов. В лабораторных работах «Спирометрия. Определение жизненной емкости легких и составляющих ее объемов» и «Импеданс биологической ткани» объектом исследования является сам студент. Так, в реальных условиях у студентов наблюдаются различные значения жизненной емкости легких, резервного объема вдоха, резервного объема выдоха (в частности, у студентов, имеющих легочные заболевания). При измерении частотной зависимости импеданса биологической ткани человека студенты наблюдают различные значения для неповрежденных тканей (рисунок 2, а) и тканей, в которых были повреждены кровеносные сосуды, нервные волокна и содержатся посторонние материалы (рисунок 2, б).

В последнее время в медицине широко используются методы лучевой диагностики, в частности рентгенодиагностика. Для рентгенодиагностики используют рентгеноскопию или рентгенографию с целью обнаружения опухолей, трещин в костях, переломов, металлических включений и для оценки состояния внутренних органов, кровеносных сосудов. Для диагностики применяют также и рентгеновскую компьютерную томографию. С лечебной целью (рентгенотерапия) рентгеновское излучение используется для подавления роста злокачественных опухолей и для лечения некоторых кожных заболеваний. В лабораторном практикуме по биофизике для ознакомления с устройством рентгеновской трубки, принципом её работы, применения рентгеновского излучения для

медицинских целей используется рентгеновский аппарат фирмы LD Didactic (Германия) (Аносова et al., 2017).

Рентгеновский аппарат может быть дополнен модулем компьютерной томографии, позволяющим с помощью компьютерной программы восстанавливать по проекциям объекта реконструкции исследуемого тела в 2D и 3D режимах, что позволяет исследовать внутреннюю структуру объекта и получать его томографические сечения в различных плоскостях. Несмотря на низкую энергию рентгеновского излучения (35 кэВ) этого учебного прибора, на нем могут быть получены компьютерные томограммы достаточно высокого разрешения для различных объектов и проведена их качественная и количественная оценка.

Рентгеновский аппарат используется в лабораторном практикуме третьего курса по дисциплине «Общая биофизика» для исследования зависимости ослабления рентгеновских лучей от природы поглощающего материала и толщины образца. В лабораторном практикуме четвертого курса аппарат используется для изучения теоретических основ рентгеновской компьютерной томографии, получения трехмерного изображения исследуемого биологического объекта (сублимированной лягушки) и работы с ним (определения размеров различных костей лягушки, линейных коэффициентов ослабления рентгеновских лучей и чисел Хаунсфилда различных биологических тканей объекта).

Исследуемый объект помещается в экспериментальную камеру аппарата на пути рентгеновских лучей. На противоположной стороне экспериментальной камеры расположен люминесцентный экран, который представляет собой свинцовое стекло, покрытое флуоресцентным материалом. На нем формируется рентгенограмма объекта исследования. Камера в блоке компьютерной томографии записывает рентгенограммы исследуемого объекта как функции угла поворота объекта, закрепленного на гониометре рентгеновской установки. Во время записи включенное программное обеспечение компьютерной томографии визуализирует процесс обратного проецирования в двух или в трех измерениях. После записи полное 3D изображение объекта исследования сразу доступно для просмотра. Чем больше число проекций исследуемого объекта, тем точнее его изображение.

С полученным 3D изображением объекта можно производить следующие операции: поворачивать, изменять масштаб, корректировать интенсивность, прозрачность и цветовую гамму, измерять расстояния в 2D плоскости сечения, величину коэффициента линейного ослабления μ и числа Хаунсфилда H, менять освещенность объекта.

Сравнивая скелетное изображение лягушки с её трехмерной реконструкцией, можно определить размеры её скелетных костей,

внутренних структур объекта. Также можно посмотреть различные срезы, послойное изображение исследуемого объекта (рисунок 3). Если регулировать интенсивность изображения, то части объема объекта, имеющие более низкий коэффициент затухания, становятся невидимыми, пока, в конце концов, не остаются одни только кости.

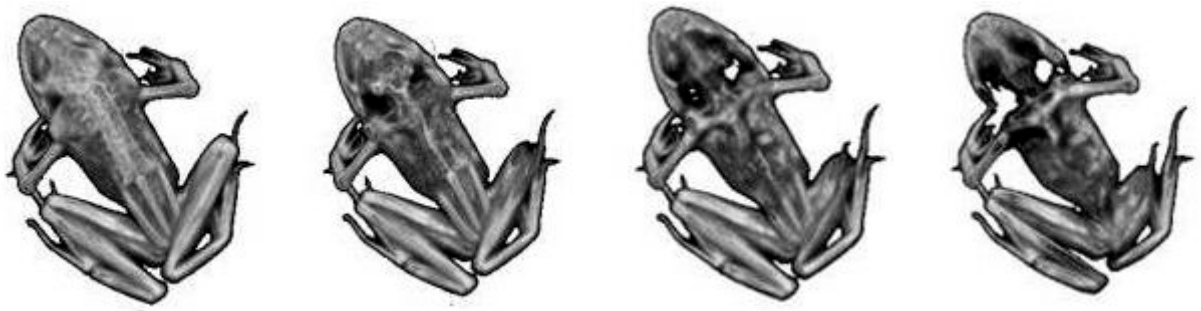


Рисунок 3. **Послойные изображения лягушки**
Figure 3. ***Layer by layer frog images***

Таким образом, студенты имеют возможность самостоятельно получить томографическое изображение практически любого биологического объекта размером не более $8\ см \times 8\ см \times 8\ см$ (лягушки, осы, пчелы, шмеля) и поработать с ним. Они определяют числа Хаунсфилда для различных органов и тканей разной плотности и делают выводы о связи этих величин между собой.

Результаты и их обсуждение
Results and discussion

Полученные нами результаты обучения позволяют сделать вывод о том, что предлагаемая методика преподавания биофизики в классическом университете позволяет повысить заинтересованность студентов в изучении дисциплины. Вместе с тем, учитывая общую проблему, связанную со слабой мотивационной стороной процесса обучения, нужно продолжать поиск новых инновационных методик обучения, способствующих активизации познавательной деятельности студентов.

Выводы
Conclusions

Системный подход к реализации преподавания учебных дисциплин в области физики, несомненно, способствует достижению фундаментальности образования будущих выпускников медицинских

специальностей. Этот подход, предполагающий рассмотрение как физики процессов, протекающих в биологических системах, так и физических принципов, на которых основаны методы медицинских исследований и работа медицинского оборудования широкого спектра применения, последовательно реализуется на лекционных, практических и лабораторных занятиях в Псковском государственном университете. При этом следует отдельно отметить перспективность использования на занятиях как реальных экспериментов биофизической направленности, так и компьютерного моделирования биофизических процессов.

Summary

This research analyses some practical teaching methods applied in the educational process when students learn biophysics at Pskov State University (Russian Federation). Subjects of the real and virtual biophysical, biological and medical experimental tasks for students working in an educational university physical laboratory are described.

Third-year students studying “General Biophysics” course investigate viscosity of liquids, physical properties of sound and light, propagation of acoustic and electromagnetic waves, concentration of sugar in solutions, osmotic phenomena etc. Fourth-year students study “Medical Biophysics” course, when experimental tasks on impedance and optical spectroscopy, measurements of the pH-factor, ultrasonic diagnostics and X-ray tomography are carried out. Some examples of computer modelling of biophysical processes are also considered.

In order to enhance the effectiveness of the teaching methods applied for study purposes, as well as to make the educational process more interesting, the authors ask students to carry out some safe biophysical experiments on themselves.

According to our experience, the suggested teaching methods are rather effective and useful.

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JURIDISKĀS IZGLĪTĪBAS REFORMU TENDENCES LATVIJĀ

Trends of Legal Education Reform in Latvia

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Abstract. *In 2015 the Ministry of Justice of the Republic of Latvia initiated reform of legal education in Latvia in order to achieve higher quality of legal education. As the most appropriate reform tool to solve this problem, a single lawyer qualification examination and the elimination of the profession of legal adviser were adopted. At the beginning of these reforms, there was no detailed study of the reasons for the lack of quality in legal education and was not audited the study programs of the relevant higher education institutions. The quality of legal education in Latvia has become a subject of public discussion for a considerable amount of time. In 2017, the Rezekne Academy of Technologies was forced to start new study programs development due to elimination of the profession of legal adviser and to create additional opportunities for student quality education in connection with the implementation of a single lawyer's professional qualification examination. The article is dedicated to issues and perspectives of legal education reforms. The study used: the method of legal analysis, studying the progress of legal education reforms, requirements of regulations in the context of the topic and analyzing the quality of legal profession standards and compliance of society, the national economy needs and the impact on the content of study programs in RTA and other higher educational institutions. The comparative method has been used to find out and compare the opinions of experts - employers, university lecturers and students, including RTA students.*
Keywords: *education, lawyer, professional standard, study program.*

Ievads
Introduction

Temata aktualitāti apliecina tas, ka kopš pagājušā gadsimta 90. gadu sākuma, attīstoties brīvā tirgus ekonomikai, privātpersonu dibinātajās augstskolās pieauga tiesību zinātņu studiju programmu skaits, kas ilgtermiņā, iztrūkstot pietiekami augstām un vienotām prasībām juridiskās izglītības iegūšanai, iespējams, samazināja juridiskās izglītības kvalitāti valstī. Tas savukārt radīja diskusijas par nepieciešamību paaugstināt prasības jurista kvalifikācijas iegūšanai (Valsts vienotā jurista profesionālās kvalifikācijas eksāmena kārtība (Anotācija, 2016)).

Tā, piemēram, 2012. gada 7. jūnijā žurnāls „Jurista Vārds" sadarbībā ar Latvijas Universitātes Juridisko fakultāti rīkoja diskusiju „Vienots valsts juridiskais eksāmens Latvijā: iespēja vai nepieciešamība". Latvijas Universitātes

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Juridiskās fakultātes 5. Starptautiskās zinātniskās konferences „Juridiskā izglītība un kultūra: pagātnes mācības un nākotnes izaicinājumi" ietvaros 2014. gada 11. novembrī atsevišķa sekcija tika veltīta juridiskās izglītības problēmjautājumu analīzei. Arī Latvijas Republikas Saeimas Juridiskās komisijas Tiesu politikas apakškomisijas darba kārtībā vairākkārt ir iekļauts un vērtēts jautājums par iespējamiem risinājumiem juridiskās izglītības kvalitātes uzlabošanai (piemēram, 2013. gada 5. novembra, 2015. gada 3. marta sēde) (Konceptuālā ziņojuma projekts par valsts vienotā jurista kvalifikācijas eksāmena ieviešanu, 2015). Pētījuma mērķis ir izpētīt juridiskās izglītības reformēšanas problemātiku un piedāvāt iespējamos risinājumus. Pētījumā izmantota: juridiskās analīzes metode, izpētot juridiskās izglītības reformu gaitu, normatīvo aktu prasības temata kontekstā un analizējot juridisko profesiju standartu kvalitāti un atbilstību sabiedrības, tautsaimniecības vajadzībām un ietekmi uz studiju programmu saturu RTA un citās augstskolās. Salīdzinošā metode pielietota noskaidrojot un salīdzinot ekspertu – darba devēju, augstskolu docētāju un studentu, tajā skaitā, RTA studentu viedokļus.

Juridiskās izglītības reformu cēloņi
Causes of Legal Education Reforms

2013. gadā Latvijas Republikas Saeimas Juridiskās komisijas Tiesu politikas apakškomisija nonāca pie secinājumiem:

1) tiesību zinātņu studiju programmu konkurence savā starpā ir radījusi nevis šo programmu kvalitātes paaugstināšanos, bet tieši pretēji – kvalitātes kritumu. Lielai daļai tiesību zinātņu studiju programmu absolventu ir salīdzinoši vājas zināšanas un prasmes jurisprudencē. Pēc autora viedokļa tas nav argumentēti un pārliecinoši pierādīts ar zinātniskiem pētījumiem un ticamiem dokumentiem (Gaveika, 2017: 158). Pilnībā jāpiekrīt profesora Dr.iur. A. Vilka viedoklim, ka Konceptuālā ziņojuma projektā par valsts vienotā jurista kvalifikācijas eksāmena ieviešanu spriedums par jurista izglītības salīdzinoši zemo kvalitāti faktiski ne ar ko nav pamatots (Jurista vārds, 2015: 17-24);
2) katra augstskola pēc saviem ieskatiem vērtē studējošo teorētiskās zināšanas un prasmes, lai piešķirtu valsts atzītu augstākās izglītības diplomu ar jurista vai juriskonsulta kvalifikāciju. Tā rezultātā diplomu saņem gan studējošie, kuriem augstskola ir noteikusi salīdzinoši augstas prasības diploma ieguvei, gan studējošie, kuriem šīs prasības ir salīdzinoši zemas. Darba tirgū visi šie studējošie uzsāk darba gaitas ar vienādiem diplomiem, bet diploma esamība, kā tas ir konstatēts praksē, neapliecina pietiekamas tiesību zinātņu programmu absolventu zināšanas un prasmes. Pēc autora viedokļa šāds secinājums ir

nepamatots, jo Noteikumi par valsts akadēmiskās izglītības standartu (Noteikumi par valsts akadēmiskās izglītības standartu, 2014) neparedz vairāk prasību, kā vienīgi bakalaura darba izstrāde un aizstāvēšana. Arī Noteikumi par otrā līmeņa profesionālās augstākās izglītības valsts standartu paredz, ka valsts pārbaudījuma sastāvdaļa ir diplomdarba (diplomprojekta) izstrādāšana un aizstāvēšana, vismaz 12 kredītpunktu apjomā vai maģistra darba izstrāde 20 kredītpunktu apjomā (Noteikumi par otrā līmeņa profesionālās augstākās izglītības valsts standartu, 2014). Līdz ar to augstskolām nav pienākums noteikt stingrākas prasības, nekā tās noteiktas normatīvajā regulējumā. Ja tomēr tiek pierādīts, ka juristu izglītības kvalitāte ir nepietiekoša, tad iepriekšminētajos normatīvajos aktos ir iespējams noteikt stingrākas prasības.

3) jurista profesija ir saistīta gan ar juridiskās palīdzības sniegšanu citām personām to tiesību aizsardzībā, gan ar valstiski svarīgu amatu (tostarp tiesnešu, prokuroru) ieņemšanu, tāpēc ir svarīgi, ka prasības jurista kvalifikācijas iegūšanai ir pietiekami augstas (Augstākās izglītības studiju programmu izvērtēšana un priekšlikumi kvalitātes paaugstināšanai, 2011). Autors vērš uzmanību uz to ka, tiesību zinātnes programmu absolventi uzreiz nevar ieņemt tiesnešu amatus, jo, lai ieņemtu tiesneša amatu līdztekus augstākajai juridiskajai izglītībai (Par tiesu varu, 1992) papildus ir jākārto profesionālais pārbaudījums – tests un tiesneša kvalifikācijas eksāmens (Tiesneša amata kandidāta atlases, stažēšanās un kvalifikācijas eksāmena kārtošanas kārtība, 2009).

Augstākās izglītības padome laika posmā no 2011. gada 9. maija līdz 2013. gada 30. aprīlim īstenoja Eiropas Sociālā fonda projektu "Augstākās izglītības studiju programmu izvērtēšana un priekšlikumi kvalitātes paaugstināšanai", vienošanās Nr. 2011/0012/1DP/1.1.2.2.1/11/IPIA/VIAA/001. Kā ir apgalvots Ministru kabineta noteikumu projekta "Valsts vienotā jurista profesionālās kvalifikācijas eksāmena kārtība" sākotnējās ietekmes novērtējuma ziņojuma (anotācijas) 2. punktā projekta ietvaros tiesību zinātņu studiju virzienā tika konstatēts, ka vairāku augstākās izglītības iestāžu darbība aktīvāk vērsta uz peļņas palielināšanu, nevis studiju programmu kvalitātes paaugstināšanu. Autors konstatē, ka šāds apgalvojums neatbilst patiesībai, jo projekta secinājumi ir vispārīgi un tos var attiecināt uz jebkuru virzienu.

Tāpat arī Pārskatā par augstākās izglītības studiju programmu izvērtēšanas rezultātiem un priekšlikumiem turpmākai studiju programmu, sagrupētu studiju virzienos, pilnveidei, uzlabošanai, attīstīšanai, konsolidācijai, slēgšanai, resursu efektīvai izmantošanai un finansēšanai no valsts budžeta līdzekļiem ir vispārīgi apgalvots, ka vairākās augstākās izglītības iestādēs studiju programmu kvalitāte

ir vāja, un tā neatbilst Eiropas Savienības noteiktajām prasībām. Tikai dažas no programmām atbilst ilgtspējas prasībām (Augstākās izglītības padome, 2013).

Šobrīd otrā līmeņa profesionālo augstāko izglītību tiesību zinātņu studiju programmās (profesionālo maģistru programmu jurista kvalifikācijas iegūšanai) Latvijā ir iespēja iegūt astoņās Latvijas augstskolās, no kurām tikai 2 augstskolas RTA un DU ir reģionālās. Daļā no šīm augstskolām, tajā skaitā RTA ir paredzēti studiju noslēguma kvalifikācijas eksāmeni. Tomēr studiju noslēguma kvalifikācijas eksāmenu esamība vai neesamība pati par sevi neliecina par noteikta kvalitātes līmeņa izglītības ieguvi.

Kā piemērs jāmin Vācijas statistika par valsts eksāmenus nokārtojušo studējošo skaita attiecību pret augstskolas eksāmenus nokārtojušo studējošo skaitu. Piemēram, Brēmenē 2013. gadā universitātes eksāmenu nokārtoja visi, savukārt pirmo valsts eksāmenu – 58,7 procenti pretendentu (Bundesministerium der Justiz und für Verbraucherschutz. Die Statistik der juristischen Prüfungen, 2013). Minētais uzskatāmi apliecina, cik liela ir atšķirība starp universitāšu un valsts eksāmenu rezultātiem. Kā apgalvo Dr. iur. M. Papēde atbilstoši juridiskajā literatūrā izteiktajam viedoklim pati augstskola, visticamāk, nespēj pietiekami objektīvi novērtēt savu studentu līmeni, ko, nenoliedzami, ietekmē arī subjektīvā interese uzrādīt pēc iespējas labākus darba rezultātus un vienlaicīgi norāda, ka izglītības kvalitātes kontroli jau nodrošinot valsts akreditācija. Turklāt esošā sistēma augstskolas studentiem varot piedāvāt daudzveidīgākas studiju programmas (Papēde, 2011).

Lai sekmētu juridiskās izglītības kvalitātes paaugstināšanos, Tieslietu ministrija uzskata. ka ir nepieciešams paredzēt obligātu valsts vienotu jurista profesionālās kvalifikācijas eksāmenu profesionālā maģistra studiju programmās jurista profesionālās kvalifikācijas iegūšanai. Kvalifikācijas eksāmens ilgtermiņā nodrošinās vienotu juristu profesionālās kvalifikācijas teorētisko un praktisko sagatavotību un tās vienveidīgas paaugstināšanas iespējas. Augstskolas izjutīs lielāku atbildību par studējošo sagatavošanu kvalifikācijas eksāmenam, nezaudējot saikni ar personām, kuras šo kvalifikācijas eksāmenu kārto (Konceptuālā ziņojuma projekts par valsts vienotā jurista kvalifikācijas eksāmena ieviešanu, 2015). 2017. gada decembrī stājās spēkā Ministru kabineta noteikumi Valsts vienotā jurista profesionālās kvalifikācijas eksāmena kārtība (Valsts vienotā jurista profesionālās kvalifikācijas eksāmena kārtība, 2017). Taču jākonstatē, ka Vienotā Jurista profesionālās kvalifikācijas eksāmena saturs nav konkrēts, jo studentiem būs pieejams saraksts ar kvalifikācijas eksāmena teorētiskās daļas vispārīgiem tematiem piecās tiesību zinātnes apakšnozarēs. Studējošajam nebūs pieejami kvalifikācijas eksāmena jautājumi un uzdevumi (kāzusi) (Valsts vienotā jurista profesionālās kvalifikācijas eksāmena kārtība, 2017: 23., 25. p) un tas nesekmē studentu motivāciju un tiesisko paļāvību, jo katrā no tematiem var būt milzīgi informācijas apjomi un neskaitāms jautājumu

saraksts. Eksāmena kārtošanas metodoloģija ir pilnībā nepieņemama no pedagoģijas un didaktikas viedokļa, jo ir pretrunā ar visās augstākās izglītības iestādēs pieņemtiem un praksē pārbaudītiem pārbaudījumu kārtošanas principiem.

Kvalifikācijas eksāmena teorētisko un praktisko daļu katrā no piecām tiesību zinātnes apakšnozarēm kārto vienā dienā. Atbilžu sagatavošanas laiks teorētiskajā daļā ir viena stunda, praktiskajā daļā – divas stundas (Valsts vienotā jurista profesionālās kvalifikācijas eksāmena kārtība, 2017: 38. p). Tas nozīmē, ka vienā dienā students faktiski kārto uzreiz divus eksāmenus teorētisko un praktisko. Turklāt Kvalifikācijas eksāmenu kārto piecas dienas pēc kārtas – katru dienu vienā no piecām tiesību zinātnes apakšnozarēm (Valsts vienotā jurista profesionālās kvalifikācijas eksāmena kārtība, 2017: 39).

Diemžēl Latvijas Studentu apvienības (Latvijas Studentu apvienība, 2017) un vairāku augstskolu iebildumi šajā sakarā netika ņemti vērā.

Savukārt Rektoru padome norādīja, ka šāda redakcija ar izsmeļošu apakšnozaru uzskaitījumu neļauj augstskolām papildināt eksāmena saturu ar citām tiesību apakšnozarēm un izteica priekšlikumu papildināt apakšnozaru uzskaitījumu, paredzot, ka augstskolas var apakšnozaru sarakstu papildināt. Šāda iespēja būtu nozīmīga augstskolām, kuras ir izveidojušas specializētas tiesību zinātņu programmas vai vēlas eksāmena ietvaros pārbaudīt – kā studējošie apguvuši citas zināšanas, prasmes un kompetenci, ko nosaka Jurista profesijas standarts (Izziņa par atzinumos sniegtajiem iebildumiem, 2017). Jāuzsver, ka juristu profesiju standarti un profesiju klasifikators (Noteikumi par Profesiju klasifikatoru, profesijai atbilstošiem pamatuzdevumiem un kvalifikācijas pamatprasībām, 2017) izvirza plašākas prasības, nekā MK noteikumi Valsts vienotā jurista profesionālās kvalifikācijas eksāmena kārtība.

RTA Tiesību zinātnes virziens juridiskās izglītības reformā
The direction of RTA law science in the legal education reform

Izglītības attīstības pamatnostādnes 2014.-2020. gadam apakšmērķa "Izglītības vide: paaugstināt izglītības vides kvalitāti, veicot satura pilnveidi un attīstot atbilstošu infrastruktūru" ietvaros paredz īstenot augstākās izglītības pārstrukturizēšanas pasākumus, kas vērsti uz studējošo skaita proporcijas maiņu atbilstoši darba tirgus vidēja termiņa un ilgtermiņa prognozēm, palielinot darba devēju lomu un motivāciju kvalitatīvas prakses nodrošināšanā un sniedzot atbalstu pirmā līmeņa profesionālās augstākās izglītības piedāvājuma palielināšanai. Rezultatīvā rādītāja *„Pirmā līmeņa profesionālās augstākās izglītības programmās studējošo īpatsvars, %"* pieaugums tiek plānots no 18 % 2013. gadā līdz 24 % 2020. gadā (Saeimas paziņojums, 2014). Ņemot vērā minētā dokumenta nostādnes, ir būtiski studiju virziena "Tiesību zinātne" attīstībai

izveidot un realizēt pirmā līmeņa profesionālo studiju programmu, lai sniegtu iespēju absolventiem pēc 2 vai 2,5 gadu ilgām studijām iesaistīties darba tirgū un juridiskajā praksē.

Turklāt RTA Tiesību zinātnes virziena ietvaros tiek realizēta otrā līmeņa profesionālās augstākās izglītības bakalaura studiju programma "Tiesību zinātne", kurā arī paredzētas izmaiņas, mainot programmas kodu, apjomu, piešķiramo grādu un saturu. Profesionālajā bakalaura studiju programma "Tiesību zinātne" (160 KP) tiks pārveidota par akadēmiskā bakalaura studiju programmu "Tiesību zinātne" (120 KP). Izmaiņu nepieciešamību noteica plānotās izmaiņas juristu izglītības struktūrā un tiesiskajā reglamentācijā, respektīvi, Izglītības un zinātnes ministrijas vēstulē "Par juriskonsulta profesijas standartu" (Izglītības un zinātnes ministrijas, 2017) tika norādīts, ka, pamatojoties uz Ministru kabineta 10.11.2015. sēdes protokollēmumu "Par valsts vienotā jurista kvalifikācijas eksāmena ieviešanu" *(prot. Nr. 58 23.§), "..juriskonsulta profesijas standarts netiks iekļauts obligāti piemērojamo profesijas standartu un profesionālo kvalifikāciju sarakstā, līdz ar to nebūs iespējams pēc studiju programmas apguves piešķirt profesionālo kvalifikāciju "juriskonsults"* (Informatīvais ziņojums, 2015). Vienlaicīgi Tieslietu ministrijai bija uzdots sagatavot tiesību aktu projektus turpmākai juriskonsulta profesijas svītrošanai no normatīvajiem aktiem, tajā skaitā grozījumus Ministru kabineta 2010. gada 18. maija noteikumos Nr. 461 "Noteikumi par Profesiju klasifikatoru, profesijai atbilstošiem pamatuzdevumiem un kvalifikācijas pamatprasībām un Profesiju klasifikatora lietošanas un aktualizēšanas kārtību". Taču jākonstatē, ka juriskonsulta profesija, tāpat kā citas vecāko juridisko lietu speciālistu profesijas ir saglabātas jaunajā 2017. gadā pieņemtajā profesiju klasifikatorā (Noteikumi par Profesiju klasifikatoru, profesijai atbilstošiem pamatuzdevumiem un kvalifikācijas pamatprasībām, 2017). Klasifikatorā ir iekļauta arī jurista palīga profesija, taču pamatuzdevumu uzskaitījums ir ļoti vispārīgs un nesistematizēts. Diemžēl 1. līmeņa Profesionālās augstākās izglītības studiju programmas „Tiesību zinātne" izstrādē nākas vadīties pēc 2009. gadā apstiprinātā Jurista palīga profesijas standarta, kas ir morāli un juridiski novecojis, jo, piemēram ir apšaubāmas prasības par latviešu valodas zināšanām, svešvalodām, datorzinībām, kas attiecas uz vidējo izglītību un citām pārspīlētām prasībām, kuras nav iespējams izpildīt īstenojot 2 gadu izglītības programmu (Gaveika, 2017: 156).

Līdz ar to ir RTA Tiesību zinātnes virzienā radās nepieciešamība veikt izmaiņas ne tikai profesionālā bakalaura studiju programmā „Tiesību zinātne", bet arī nepieciešamība izveidot jaunu pirmā līmeņa profesionālās augstākās izglītības studiju programmu „Tiesību zinātne", kas tomēr nodrošinātu pēctecību un ļautu tās absolventiem iegūt jurista palīga profesiju, iegūt 4. profesionālo kvalifikācijas līmeni, turpināt pēc pašu absolventu izvēlēta laika (iegūstot pieredzi tiesību piemērošanas darbībā jurista palīga profesijā) vai bez pārtraukumu

turpinot studijas pilna vai nepilna laika studijās akadēmiskajā bakalaura studiju programmā „Tiesību zinātne" un vēlāk arī turpināt iegūt jurista kvalifikāciju, 5. profesionālo kvalifikācijas līmeni profesionālā maģistra studiju programmā „Tiesību zinātne" (1. līmeņa Profesionālās augstākās izglītības studiju programmas „Tiesību zinātne" licencēšanas pieteikuma materiāli, 2018).

Pirmā līmeņa profesionālās augstākās izglītības studiju programmai „Tiesību zinātne" ir perspektīvas arī no absolventu iekļaušanās darba tirgū viedokļa, jo programma nodrošinās ceturtā līmeņa profesionālas kvalifikācijas speciālistu piedāvājumu un iekļaušanu sabiedrībā un darba tirgū tiesību jomā, radīs motivāciju tālākizglītībai un sniegs iespēju praktiski sagatavoties, lai turpinātu studijas otrā līmeņa programmā un turpmāk profesionālā maģistra studiju programmā piektā līmeņa profesionālās kvalifikācijas „jurists" ieguvei. Par labu šādām viedoklim liecina absolventu aptaujas studējošo aptauju rezultāti.

Rēzeknes Tehnoloģiju akadēmija regulāri veic stadiju virziena „Tiesību zinātne" profesionālā bakalaura studiju programmas absolventu aptaujas par darba gaitām. Aptauju rezultāti nepārprotami liecina par absolventu augstu izglītības kvalitāti, profesionālu līmeni un RTA studiju programmu teicamu kvalitāti un tas savukārt neapstiprina Tieslietu ministrijas nepierādītos apgalvojumus par juridiskās izglītības zemo kvalitāti (sk. tabulu 1.).

Tabula 1 **Tiesību zinātnes virziena absolventu aptaujas rezultāti**
Table 1 ***Law science graduates survey results***

Aptaujas jautājumi	***2016. gada rudens semestra absolventu aptauja***	***2016. gada pavasara semestra absolventu aptauja***	***2017. gada absolventu aptauja***
Kā novērtējat studiju programmas kopumā?	71 % - laba 29 % - apmierinoša	97 % - laba	71 % - laba 29 % - apmierinoša
Jomas, kurās zināšanas izrādījās visnoderīgākās.	100 % - personīgajā izaugsmē	100 % - personīgajā izaugsmē	71 % - darbā 29 % - personīgajā izaugsmē
Vai strādājat specialitātē (jomā), kurā studējāt?	100 % - jā	71 % - jā 29 % - nē	75 % - jā 25 % - nē

Turklāt ap 10 % pilna laika studentu un ap 70 % nepilna laika studentu, kuri studē profesionālā bakalaura studiju programmā jau studiju laikā strādā juridiskās jomas darba vietās vai amatos (RTA Tiesību zinātnes virziena Pašnovērtējuma ziņojums par 2016./2017. studiju gadu, 2018).

Analizējot darba tirgus situāciju tiesību sfērā 2017. gadā apstiprinātā profesiju klasifikatora aspektā (Noteikumi par Profesiju klasifikatoru, profesijai atbilstošiem pamatuzdevumiem un kvalifikācijas pamatprasībām, 2017),

jākonstatē, ka personas ar ceturtā līmeņa kvalifikāciju un iegūtu profesiju – jurista palīgs var būt pieprasītas un var strādāt:

- lielu, vidējo un mazu uzņēmumu darba nodrošināšanai *(piemēram, apdrošināšanas uzņēmumos, tiesu ekspertu iestādēs, finanšu institūcijās, palīdzot vecākajiem speciālistiem juridiskajās lietās (juristiem) nodrošināt juridisko pakalpojumu sniegšanu);*
- nevalstiskajās organizācijas *(jurista palīga amatā);*
- pašvaldību institūcijās *(piemēram, Bāriņtiesās, ieņemot bāriņtiesu darbinieka, bāriņtiesas locekļa amatus atbilstoši „Bāriņtiesu likuma" prasībām);*
- tiesībaizsardzības iestādes *(piemēram, veicot prokurora palīga pienākumus (profesijas kods 3411 02) atbilstoši „Prokuratūras likuma" prasībām; veicot tiesneša palīga pienākumus (profesijas kods 3411 03), veicot tiesas konsultanta (profesijas kods 3411 04), tiesas priekšsēdētāja palīga pienākumus (profesijas kods 3411 05), amatos atbilstoši likuma „Par tiesu varu" prasībām);*
- zvērinātu tiesu izpildītāju un zvērinātu advokātu birojos, ka arī citos juridiskajos birojos *(veicot jurista palīga pienākumus)* (Noteikumi par Profesiju klasifikatoru, profesijai atbilstošiem pamatuzdevumiem un kvalifikācijas pamatprasībām, 2017).

Lai varētu nodrošināt studējošajiem iespējas būt saistītiem ar darba vidi arī studiju laikā, kā arī lai veicinātu strādājošo iesaistīšanos mūžizglītības un profesionālās pilnveides procesos, programma tiks realizēta arī nepilna laika studijās. Tas nodrošinās iespēju neatrauti no darba tirgus vides iegūt paša studenta profesionālās juridiskās karjeras attīstībai nepieciešamo izglītību, kas rezultāta dos studējošajam labklājības pieaugumu, ka arī stabilitāti un izglītības paredzamību un profesionālas karjeras perspektīvu nākotnei.

Kopumā piedāvātā izglītības sistēma Rēzeknes Tehnoloģiju akadēmijā nodrošinātu ne tikai pašiem potenciālajiem studentiem iespēju plānot savu profesionālo attīstību un karjeru, bet arī nodrošinātu kvalificētu dažāda līmeņa juridiskās nozares speciālistu piesaisti darba tirgum Latgales reģionam un kopumā Latvijas darba tirgum, nodrošinātu pakāpeniskumu juridiskās karjeras attīstībā, paaugstinātu konkurenci darba tirgus iekšienē un piesaistāmo speciālistu kvalitāti.

Secinājumi
Conclusions

1. Pētījuma mērķis - izpētīt juridiskās izglītības reformu argumentācijas pamatotību un lietderīgumu pēc autora viedokļa ir sasniegts. Autors nonāk pie secinājuma, ka ideja par vienoto jurista profesionālās kvalifikācijas

eksāmenu kopumā ir atbalstāma, jo tas sekmēs jurista profesijas kvalitāti daudzās sabiedrībai svarīgās jomās un nozarēs.

2. Taču juriskonsulta profesijas likvidēšana ir nepārdomāta, nepamatota un neloģiska, jo juriskonsulta profesija pēc 2017. gadā pieņemtā jaunā profesiju klasifikatora ir vecāko juridisko lietu speciālistu sarakstā un ir uzskatāma par otrā līmeņa juridisko lietu speciālistu profesiju 3 līmeņu sistēmā: 1. jaunākie juridisko lietu speciālisti; 2. vecākie juridisko lietu speciālisti un 3. juristi. Šāda trīs līmeņu sistēma nodrošina loģiski secīgu profesionālo izaugsmi.
3. 2017. gada decembrī apstiprinātā Vienotā Jurista profesionālās kvalifikācijas eksāmena saturs nav konkrēts, bet eksāmena kārtošanas metodoloģija ir pilnībā nepieņemama no pedagoģijas un didaktikas viedokļa, jo ir pretrunā ar visās augstākās izglītības iestādēs pieņemtiem un praksē pārbaudītiem pārbaudījumu kārtošanas principiem. Diemžēl Latvijas Studentu apvienības un vairāku augstskolu iebildumi šajā sakarā netika ņemti vērā.
4. 2009. gadā apstiprinātais jurista palīga profesijas standarts ir vispārīgs un jau sākotnēji bija izstrādāts nekvalitatīvi, jo bez vajadzības dublēja vidējās izglītības standartus, bet tagad ir pilnībā morāli novecojis un neatbilst vairākiem spēkā esošiem normatīvajiem aktiem. Nepieciešama jurista palīga profesijas standarta pilnīga pārstrāde, kas tiktu balstīta un pamatota ar objektīviem zinātniskiem pētījumiem, lai noteiktu skaidras un konkrētas prasības jurista palīga profesijai.
5. Pašreizējās situācijas analīze Rēzeknes Tehnoloģiju akadēmijā liecina, ka gandrīz visi Tiesību zinātnes maģistra studiju programmas absolventi ir iekļāvušies darba tirgū atbilstoši iegūtai izglītībai un kvalifikācijai. Ap 10 % pilna laika studentu un ap 70 % nepilna laika studentu, kas studē profesionālā bakalaura studiju programmā jau studiju laikā strādā juridiskās jomas darba vietās vai amatos. Tāpēc reģionālajās augstskolās ir nepieciešama Tiesību zinātnes studiju programmu saglabāšana, to pakāpeniska un pamatota pilnveidošana, paredzot to specializāciju attiecīgā normatīvajā regulējumā un Vienotā jurista profesionālās kvalifikācijas eksāmena saturā.

Summary

According to the author's point of view The aim of the research - to investigate the validity and usefulness of argumentation of legal education reform- has been achieved. Author comes to the conclusion that the idea of a single lawyer's professional qualification exam is to be welcomed, as it will contribute to the quality of the legal profession to the public in many key areas and sectors.

However, the elimination of the profession of legal counsel is thoughtless, unfounded and illogical, because the profession of legal adviser after the new occupational classifier adopted in 2017 is on the list of senior legal speciālists and is considered to be a second level legal specialist profession in the 3-tier system: 1st the youngest legal affairs speciālists; 2nd

senior legal affairs speciālists and 3rd lawyers. This three-tier system provides logically sequential professional growth.

The survey of students of the professional higher education Bachelor study program in "Law" of the Rezekne Academy of Technologies shows that on the one hand young people have more choices regarding the development of new study programs, but on the other hand currentl students of 1st, 2nd and possibly 3rd year will have to go to the Academic Bachelor's study program. This situation is contrary to the the principle of legal certainty and in general undermines the prestige of legal education.

In 2009, the approved lawyer's assistant's standard of profession is general and was originally designed poorly because of unnecessary duplication of secondary education standards, but is now completely morally outdated and does not comply with a number of valid laws and regulations. A complete processing of the lawyer's assistant profession standard is required, which would be based and justified on objective scientific research to establish clear and specific requirements for the above requirements.

Analysis of the current situation at the Rezekne Academy of Technology shows that almost all graduates of the Master's program in Law have entered the labor market according to the acquired education and qualification. About 10 % of full-time students and about 70 % of part-time students studying in the professional Bachelor's study program are already working in legal areas workplaces or positions. Therefore, in regional higher education institutions it is necessary to preserve Law studies programs, their gradual and substantiated improvement, providing that in the relevant regulatory framework of specialization and in the content of the Single Lawyer Professional Qualification Exam.

The content of the Single lawyer's professional qualification exam approved in December 2017 is not specificē but examination methodology is totally unacceptable from the pedagogical and didactic point of view, because It is contrary to all higher education institutions agreed principles and in practice proven test-taking principles. Unfortunately, the objections of the Student Association of Latvia and several universities in this regard were not taken into account.

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МЕЖДУНАРОДНЫЕ ПРОЕКТЫ В СФЕРЕ ОБРАЗОВАНИЯ КАК СРЕДСТВО ФОРМИРОВАНИЯ НАВЫКОВ МЕЖКУЛЬТУРНОЙ КОММУНИКАЦИИ В ПРОЦЕССЕ ПРОВЕДЕНИЯ СОВМЕСТНЫХ НАУЧНЫХ ИССЛЕДОВАНИЙ

Transnational Projects in Higher Education: Development of Intercultural Communication Skills by means of Joint Research

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Abstract. *The article analyses the efficiency of implementing transnational virtual projects in higher education. The research aims at defining the most appropriate ways of developing intercultural communication skills among students in the process of doing joint research. The authors describe the International Conference Project on Global Issues held at Samara State Technical University (Russia) and Notre Dame College (USA). Special emphasis is laid upon the stages of the project programme worked out by the authors, difficulties in communication faced by students in the course of collaboration and the ways to eliminate them. The authors assess project efficiency not only by analysing psychological and cultural factors, but also by examining the data of the questionnaire survey held among Russian and American students who have finished their joint research. This kind of multifaceted approach helped identify advantages and disadvantages of the project programme and reveal the friction points that can arise in the process of professional interaction of the representatives of different cultures. The authors conclude that transnational virtual projects give valuable opportunities to develop intercultural communication skills as students learn to make adaptive behavior changes in different cultural contexts, analyse friction points and construct effective strategies for their solution. They gain the ability to synthesize the cultures/languages/rhetorics/spaces in conflict for a constructive communicative outcome.*
Keywords: *higher education, virtual project, intercultural communication, joint research, collaboration, cultural factors, professional interaction.*

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Введение
Introduction

В настоящее время международное взаимодействие имеет значение как для развития отдельно взятой личности, так и всего общества. Многим предстоит работать в межкультурном пространстве и общаться с людьми разных национальностей, поэтому представляется необходимым научить будущее поколение вести конструктивный диалог, уважая культуру другого народа и понимая значение общечеловеческих ценностей. Важно сформировать умение определять границы между различными моделями поведения для того, чтобы быть в состоянии правильно и своевременно реагировать на трудности, возникающие при общении.

Вышеперечисленные задачи могут быть решены посредством международных программ, которые очень востребованы в студенческом сообществе. К ним относятся программы академического обмена и научных исследований (Erasmus, ASSE, DAAD); программы двойных дипломов; Tempus – программа трансъевропейской мобильности в области университетского образования; американские транснациональные программы (Global Initiative, Global Ugrad). Реализуются и программы, направленные на изучение иностранных языков: например, проект “Russia Today/Germany Today” (Краснощеков & Трапицын, 2015).

Данные программы способствуют развитию международных межвузовских связей и предоставляют студентам широкие возможности в повышении международной мобильности (Ершов, 2012; Евстропова, 2014; Иванов, 2002). Самое главное, по нашему мнению, заключается в том, что они позволяют учащимся погрузиться в многонациональную среду и познать культуру, характер мышления другого народа. Однако данные программы доступны не всем желающим из-за большого конкурса на участие и возможных финансовых затрат, поэтому необходимо стремиться к поиску других инновационных решений. Одним из вариантов может стать реализация международных проектов посредством сети Интернет (Clouet, 2013; Shouter, 2012; Lewis et al., 2010; Thorne, 2010).

Проект “International Conference Project on Global Issues (ICP)” был организован в 2017 г. на базе Самарского государственного технического университета в России и Notre Dame College в США (г. Кливленд). В качестве средств коммуникации были использованы социальные сетевые сервисы Facebook и Skype. В основу проекта легла идея о проведении совместных научно-практических исследований по актуальным вопросам развития современного общества.

Основной целью проекта стало развитие у студентов навыков и умений, связанных различными аспектами транснациональной

коммуникации. Важным аспектом осуществления проекта стало осознание студентами ответственности за решение общемировых проблем, а также необходимости сотрудничества при поиске таких решений.

В данной статье рассмотрим, какую роль играет развитие транснациональной коммуникативной компетенции в образовательном процессе, проанализируем, каким образом формирование межэтнической толерантности влияет на создание благоприятных условий для успешной межкультурной коммуникации в профессиональной деятельности, личностному росту и самореализации. Посмотрим, какие трудности могут возникать в процессе реализации международных проектов, а также обсудим наиболее эффективные способы их преодоления.

Объектом исследования является образовательный процесс в рамках международного проекта. Предметом исследования служит социально-педагогическая работа со студентами вузов, направленная на развитие навыков межкультурной коммуникации.

Целью исследования является выявление эффективных механизмов формирования навыков межкультурной коммуникации в процессе реализации международного проекта.

Инструментарий исследования включает теоретические и эмпирические методы: анализ лингвистической, культурологической, психологической и социально-педагогической литературы, изучение опыта работы в рамках международных проектов, наблюдение, беседа, анкетирование, анализ результатов письменных работ студентов.

Теоретическая основа темы
The Theoretical Background

В эпоху глобализации очень важно понимать значимость развития у студентов навыков межкультурной коммуникации, которые, без сомнения, будут необходимы им в профессиональной деятельности. При этом следует делать акцент на сохранении самобытности собственной культуры и, соответственно, умении преодолевать возникающие разногласия, связанные с этнокультурными, религиозными и ценностными факторами.

В русской педагогике существует немало работ, в которых подчеркивается ключевая роль развития социокультурной компетенции при обучении иностранному языку (Соловова, 2006; Муравьева, 2011; Ярцева, 2009). В англоязычной литературе рассматривают такие близкие к этому понятию термины, как *intercultural competence*, *transcultural communication, cross-cultural adaptation, intercultural sensitivity* (Byram, 2005; Canagarajah, 2013; Clouet, 2013; Shuter, 2012; Sinicrope et al., 2007). Данные термины так или иначе обозначают способность выйти за рамки своей культуры и

успешно взаимодействовать с представителями других культур, имеющими совершенно иной менталитет. По словам Е. Н. Соловововой, такое умение вести диалог культур подразумевает как знание собственной культуры, так и культуры другого народа, а именно стиля жизни, традиций и характера мышления (Соловова, 2006).

Однако знания языка и национальной культуры не достаточно для эффективного взаимодействия представителей разных стран и народов. В связи с этим важно делать акцент на формировании транснациональной коммуникативной компетенции, более широкого понятия, чем социокультурная компетенция. По мнению И. Г. Беляковой, она позволяет индивидам «осуществлять критическую рефлексию и определять границы между различными поведенческими моделями» (Белякова, 2016: 64). В таком контексте владение иностранным языком мыслится «не столько как необходимый атрибут для взаимодействия с людьми, сколько как ключевое условие для осознания собственной социальной и культурной принадлежности и последующего развития» (Белякова, 2016: 64).

В случае с дистанционными проектами имеет место термин “Transnational Communicative Competences” (Houston, 2017), который обозначает сумму знаний и соответствующих им навыков, связанных с различными аспектами транснациональной коммуникации посредством сети Интернет. Выделено 4 аспекта: а) языковой (использование грамматики, выбор лексики, умение пользоваться доступными ресурсами для достижения коммуникативного успеха); б) риторический (стратегии для достижения коммуникативных целей); в) социокультурный (знание традиций, национального характера, норм поведения); г) пространственный/медийный (использование средств связи) (Houston, 2017). В рамках каждого из них следует развивать определенную коммуникативную компетенцию, необходимую для успешного международного сотрудничества, аналогичного проекту ICP.

По мнению Е. Н. Соловововой, одним из способов решения глобальных проблем может стать формирование социальной компетенции (как части коммуникативной компетенции). Она предполагает «готовность и желание взаимодействовать с другими, умение поставить себя на место другого и способность справиться со сложившейся ситуацией» (Соловова, 2006: 11). В этом контексте важное место занимает развитие чувства толерантности у молодежи (Бондырева & Колесов, 2003; Marchenoka, 2017; Van Driel et al., 2016). Толерантность позволяет «наладить отношения между людьми, имеющими разные взгляды, ценности, идеалы, но в равной мере выбирающими благо для себя и для другого человека» (Лопухова, 2013: 3).

Большинству культур свойственна эгоцентричность – убежденность представителей в том, что наиболее правильными являются именно их

стандарты и нормы поведения. Это способствует тому, что носители одной культуры пытаются навязать свое мнение и свои каноны другим, и межкультурное взаимодействие в итоге не достигает уровня эффективного диалога. При этом следует помнить о том, что процессы глобализации набирают свои обороты, и лучшим решением станет отказ от абсолютизации истины и формирование способности постигать истину через диалог и принятие иного типа мышления (Лопухова, 2009).

В своем исследовании А. Д. Карнышев, О. А. Карнышева, Е. А. Иванова приходят к выводу о том, что индивиды с низкой межэтнической толерантностью склонны перекладывать всю ответственность за качество межкультурного диалога на другую сторону или случайные факторы. Люди с высокой межэтнической толерантностью не винят других в проблемах, возникающих в процессе коммуникации, а стараются исправить свое собственное поведение (Карнышев et al., 2013). По нашему мнению, развитие именно этого качества личности может способствовать уменьшению неловких и даже конфликтных ситуаций при межнациональном общении.

Как показывают исследования, межэтническая толерантность наиболее развита у студентов, имеющих больше возможностей поддерживать дружбу с людьми разных национальностей (Godwin et al., 2001). Одной из таких возможностей, как мы считаем, могут стать дистанционные студенческие проекты, поскольку с их помощью создается естественная языковая среда и реальные условия для диалога культур. Как отмечают А. Паран и Л. Серку, формирование навыков межкультурной коммуникации невозможно без прямого контакта с другими культурами (Paran & Sercu, 2010).

Мы полагаем, реализация международных проектов играет важную роль в развитии у студентов ряда компетенций для самостоятельной работы с коммуникативными трудностями, а также способности разрабатывать стратегии, которые помогли бы им предвидеть, решать или даже предотвращать их в дальнейшем.

Поэтапная программа проекта
Stages of the Project Programme

В реализации проекта ICP приняли участие 22 студента Самарского государственного технического университета (СамГТУ) и 20 студентов Notre Dame College. В рамках проекта участники были разделены на мини-группы, каждая из которых включала 2-3 представителя СамГТУ и 2 представителя Notre Dame College. Задачей студентов каждой группы было выполнение совместного исследования по интересующей теме. Участниками проекта были затронуты проблемы существования

противоречий между процессами глобализации и статусом гражданства, вопросы экологии и устойчивого развития, современной культуры и литературы. Группы работали дистанционно с применением современных информационно-коммуникационных технологий. В каждой мини-группе научное руководство осуществлялось одним преподавателем американского и одним преподавателем русского вуза.

Программа проекта имела несколько отличий в двух странах, поскольку была адаптирована под особенности целевой аудитории и характер уже существующей в каждом вузе учебной программы. В Notre Dame College проект проводился в рамках дисциплины “Advanced Composition”, то есть был обязательной частью образовательного процесса. Консультации по проекту имели место в начале каждого занятия и проходили два раза в неделю. В СамГТУ проект был запланирован как факультатив, то есть отбор осуществлялся на конкурсной основе среди всех желающих. При этом обязательным условием было знание английского языка на уровне Upper-Intermediate и выше. Такой подход к отбору в СамГТУ объясняется тем, что вуз является техническим, и не все студенты в учебной группе имеют такой уровень английского языка, который позволил бы им свободно обсуждать научные вопросы с американскими коллегами. Участие в проекте целой группы в рамках дисциплины «Иностранный язык» представлялось невозможным. В России было проведено несколько подготовительных к проекту занятий, и далее студенты работали с научным руководителем в основном дистанционно. Консультации проходили один раз в неделю и были факультативными.

Если в США работа с коммуникативными трудностями происходила по мере их поступления, то в России было запланировано предварительное обучение, направленное на предупреждение их появления. В СамГТУ реализация проекта началась на несколько недель раньше и включала отбор участников, лекции по межкультурной коммуникации, а также специально разработанные тренинги. Основу лекций составили труды российских (Гудков, 2003; Тер-Минасова, 2008; Тхорик, 2006) и зарубежных исследователей (Byram, 2005; Canagarajah, 2013; Tuleja, 2014), а также учебное пособие по деловой коммуникации, разработанное для специальностей СамГТУ (Градалева, 2015). В этот момент было важно начать формировать у участников готовность и желание взаимодействовать с другими, интерес и уважение к другой культуре, широту взглядов, принятие иного типа мышления, умение поставить себя на место другого. Для развития навыков совместной работы была использована технология «командообразования» (Евстропова, 2014) с особым акцентом на игры, направленные на сплочение команды, и игры на стимулирование конструктивной совместной деятельности.

Последующие этапы реализации проекта были одинаковыми:

1. Знакомство партнеров по темам: изучение и обсуждение мини-биографий друг друга.
2. Совместная работа по теме: а) обсуждение актуальности исследования; б) постановка цели и задач исследования; в) обмен научной литературой, отобранной для анализа, и ее обсуждение; г) обмен мнениями по вопросам, возникающим в процессе работы над темой; д) проведение интервью.
3. Оформление результатов исследования: написание научной работы, создание презентации, запись видео-выступления для вуза-партнера.
4. Представление результатов исследования на V Международном конкурсе презентаций “Global World – Global Careers” в СамГТУ.
5. Подведение итогов: а) устно: обсуждение результатов совместной работы, выступлений на конференции и видео-фрагментов; б) письменно: эссе об одной из трудностей коммуникации, включающее описание причины ее возникновения и действий по ее урегулированию (в качестве дополнительного задания).
6. Анонимное анкетирование, направленное на выявление положительных и отрицательных сторон проекта, возникающих трудностей и его эффективности в целом.

Как отмечено в анкетах, одной из наиболее интересных частей проекта для студентов стала подготовка презентации совместного исследования, ее представление и обсуждение на конкурсе в СамГТУ. Студенты российского университета выступили с докладом и презентацией на английском языке и представили аудитории видео-выступление американских студентов. В основу каждой презентации легло сравнение их мнений по теме исследования. Выступления русских студентов были записаны на видео и размещены в социальной сети Facebook для обсуждения в американском вузе. Сотрудничество студентов закончилось положительными эмоциями, удовлетворенностью полученными результатами и обоюдной похвалой.

Трудности и способы их преодоления
Friction Points: Pedagogical Implications

Несмотря на то, что этапы проекта были четко спланированы, и студенты были заранее подготовлены к межкультурному взаимодействию, в процессе совместной работы возникали определенные лингвистические и экстралингвистические трудности.

Еще до начала реализации проекта самыми очевидными представлялись трудности с лексикой и грамматикой, которые могут

коснуться студентов из России. В действительности у них не оказалось проблем с выражением собственных мыслей. В высказываниях присутствовало некоторое количество грамматических ошибок, но они не затрудняли взаимопонимание. Важно то, что русские не стеснялись высказываться и не боялись совершать ошибки, а американцы не реагировали на них негативно. Основные проблемы возникли с неверным употреблением сленга, который российские участники пытались ввести в диалог для того, чтобы быть с собеседником на дружеской волне. Неверное употребление разговорных фраз повлекло появление неловких ситуаций и даже обид со стороны американцев. Социально-психологические моменты были решены путем бесед об особенностях сленга и специфике делового общения (Malyuga, 2012). Так, русские студенты познали в теории и на практике, как важно выдерживать определенный стиль профессиональной коммуникации.

Некоторые организационные сложности обусловлены различиями в учебных программах двух вузов-партнеров. Поскольку в России проект был спланирован как факультатив, здесь студенты оказались более мотивированными к коммуникации, но менее организованными в учебном плане. Американские студенты работали регулярно и на своих занятиях стабильно писали заметки в рабочих группах в социальной сети. Русские должны были отвечать партнерам по исследованию по мере необходимости в свое свободное время, что приводило к задержкам в ответах. Однако следует отметить высокий уровень качества ответов у русских, поскольку участие принимали только желающие.

По мнению около половины российских участников, к середине проекта их мотивация снизилась из-за «коротких ответов американских студентов». Даже не смотря на то, что ответы были регулярными. Во-первых, ввиду обязательности программы некоторые американские участники воспринимали работу как часть урока, в то время как у русских основным мотивирующим фактором был в чистом роде интерес к проекту. Во-вторых, реализация проекта в рамках учебной дисциплины “Advanced Composition” повлияла на выбор жанровых форм речи. Американские студенты четко придерживались академического стиля письма, который диктует короткие, четкие и ясные высказывания по теме. В США этому стилю не свойственно красноречие и сложность аргумента. Кроме того, в отличие от России, в США объем высказываний в деловой коммуникации не является показателем интереса к беседе или его отсутствия.

Несовпадение целей двух сторон, выявленное в процессе совместной деятельности, повлекло определенные проблемы. Изначально многие русские студенты были мотивированы в основном возможностью практики общения на иностранном языке. Это не совпадало с целью американских

студентов, связанной именно с научной деятельностью. Поскольку средством коммуникации в рамках проекта была социальная сеть Facebook, у россиян возникало непреодолимое желание неформального общения с зарубежными коллегами, что не было взаимным. Обиды личного характера усложнили обсуждение совместных исследований. Проблема была решена посредством проведения бесед о целях работы и характере международных деловых отношений. К концу проекта студентами было отмечено, что основной целью таких проектов в действительности является развитие навыков межкультурной коммуникации при ведении совместной исследовательской работы, что очень пригодится в будущем в профессиональной сфере. Более половины указали и на значимость познания новых для них понятий и применения на практике новых методов исследования. Это приблизило их к целям американских студентов и обеспечило успешную коммуникацию. По результатам анкетирования, 67 % американцев и 65 % русских признали эффективность таких проектов. Более того, 85 % американцев и 100 % русских посоветовали бы друзьям принять участие в подобном проекте.

Описанные выше ситуации показывают, как организационные трудности тесно переплетаются с языковыми и социально-культурными. Это говорит о том, что новые международные проекты следует планировать в одинаковых учебных условиях: либо в рамках одной и той же дисциплины (например, курса по межкультурной коммуникации), либо в качестве факультатива в обоих сотрудничающих вузах со строгим конкурсным отбором. Кроме того, следует более детально продумывать способы и средства осуществления коммуникации. Как выяснилось, социальная сеть Facebook не смогла создать идеальные условия для совместной работы, а, наоборот, ни один раз вводила участников в заблуждение по поводу стиля общения и манеры взаимодействия.

Нередко на консультациях поднимался вопрос, связанный с риторическими различиями в коммуникативном поведении партнеров по проекту. Американские студенты отмечали сложности в поддержании разговора со своими сверстниками из России. Основной вопрос касался того, заинтересован ли собеседник в общении, если он заканчивает свои сообщения утверждением, которое не приглашает к дальнейшему обсуждению. Было ясно, русские студенты очень мотивированы «говорить», и сообщения такого рода возникали только из-за того, что они не знали, как правильно связать разговор. Известно, что культурные различия в вопросах коммуникативных ролей могут привести к прерыванию коммуникации, неправильному толкованию намерений и межличностному конфликту (Wolfram & Schilling-Estes, 2006). Так, было принято решение затронуть со студентами проблему варьирования речевых норм в разных

языках и риториках. Совместный детальный анализ высказываний убедил студентов, что россияне действительно заинтересованы в беседе. Далее было предложено смоделировать диалоги при помощи введения заключительных фраз, междометий и связывающих вопросов, помогающих продолжить коммуникацию.

Как указывает М. Байрам, ключевым в преодолении трудностей межкультурной коммуникации является развитие аналитического и заинтересовывающего коммуникативного поведения. Необходимо уметь анализировать трудности, видеть обе стороны конфликта и создавать оптимальное решение, основанное на синтезе (Byram, 2005).

Когда студенты научились успешно выявлять и анализировать трудности, мы начали практиковать системный аналитический подход. Это позволило научиться их классифицировать и находить наилучшие способы преодоления. На основе теории межкультурной компетенции М. Байрама (Byram, 1997) был разработан поэтапный план классификации и анализа трудностей:

1. Дать объяснение трудности, возникшей в конкретной беседе.
2. Отнести выявленную трудность к одному из аспектов: а) языковому; б) риторическому; в) социокультурному; г) медийному.
3. Обсудить потенциальные причины, которые могут вызвать трудности. При этом принимать во внимание, что существуют различия между языками как системами смыслообразования, способами использования языка для разных целей в разных культурных группах и контекстах.
4. Предложить способы синтеза двух культур / языков / риторики / пространств для достижения конструктивного коммуникативного результата.

В стратегическую методологию М. Байрама добавлена классификация трудностей на втором этапе работы, которая позволяет более целенаправленно искать эффективные методы их преодоления. Предложенный нами заключительный этап помогает развивать поведенческую компетентность, которая заключается в способности синтезировать разные культуры, языки, риторические стратегии, пространства, что приведет к успешной межкультурной коммуникации. М. Байрам отмечает, для реализации синтеза могут служить невербальные сигналы, стили общения, диалоговые стратегии (Byram, 2005).

Данный подход к анализу применялся в рамках проекта и позволил сократить количество трудностей коммуникации. По результатам опроса, 65 % студентов стали более уверенно справляться с различными

сложностями, возникающими в процессе коммуникации с представителями другой культуры.

Выводы
Conclusion

Формирование навыков межкультурной коммуникации наиболее эффективно в условиях прямого контакта с другими нациями и культурами. Одним из возможных вариантов создания таких условий являются международные дистанционные проекты. С одной стороны, в таком контексте развитие навыков межкультурной коммуникации происходит как самостоятельный процесс в форме приобретаемого студентами опыта. С другой стороны, реализация проектов в рамках образовательной программы дает возможность преподавателю во многом контролировать данный процесс, создавая наиболее подходящие условия и ситуации для получения определенных знаний, развития необходимых навыков и умений. Процесс является полностью спланированным, основанным на определенном теоретическом материале. При необходимости возможно привлечение практических упражнений на отработку проблемных моментов.

Мы полагаем, при организации новых международных проектов следует обратиться к синтезу подходов и методик, реализованных в России и в США. Целесообразно планировать проект в одинаковых учебных условиях: либо в рамках одной и той же дисциплины (например, курса по межкультурной коммуникации), либо в качестве факультатива в обоих сотрудничающих вузах со строгим конкурсным отбором. Формирование навыков межкультурной коммуникации необходимо начинать на подготовительном этапе, как это было сделано в СамГТУ, где полученные теоретические знания о специфике иной культуры и делового общения были отработаны в практическом плане в моделируемых ситуациях межкультурного диалога. Далее, как это происходило в США, следует проводить тщательную работу с коммуникативными трудностями по мере их поступления во время реализации проекта. Соответственно, каждое занятие необходимо начинать с обсуждения возникших проблемных моментов и способов их решения. Важное место занимает и проведение индивидуальных консультаций, поскольку особенности характера не позволяют некоторым студентам открыто обсуждать трудности в присутствии остальных.

Ключевым в развитии навыков межкультурной коммуникации является именно формирование способности правильно реагировать на возникающие проблемы, адаптироваться и находить наилучшие способы их решения. Межкультурный диалог может принимать совершенно разные

формы, и нельзя заранее предугадать возможный ход коммуникации. Это говорит о том, что правильнее будет не стремиться подготовить студентов к безошибочной коммуникации, а научить успешно справляться с возникающими трудностями. Именно это приведет к эффективной межкультурной коммуникации.

С целью развития способности видеть и преодолевать трудности в процессе коммуникации нами был разработан системный аналитический подход. Поэтапный план классификации и анализа трудностей позволяет научить студентов соотносить каждую возникающую трудность с конкретным аспектом транснациональной коммуникации с целью более целенаправленного поиска методов их преодоления. Предложенный нами заключительный этап работы помогает развивать поведенческую компетентность, которая заключается в способности синтезировать разные культуры, языки, риторические стратегии, пространства.

Способы и средства общения оказывают немалое влияние на успех межкультурной коммуникации. Мы пришли к выводу о том, что социальная сеть Facebook не может создать идеальные условия для делового взаимодействия, а, наоборот, вводит участников в заблуждение по поводу стиля и манеры общения. Однако при необходимости данные сложности можно решить посредством изучения лексических и синтаксических особенностей официально-делового стиля и разъяснения целей совместной работы на подготовительном этапе.

Полученные результаты и разработанные методы позволят создать более эффективную программу обучения, а полученный опыт организационной и педагогической работы будет полезен при разработке программ дальнейших международных сетевых проектов.

Summary

Educators in the fields of Cultural Studies and Second Language Acquisition consider socio-cultural or intercultural competence key for the success of transnational and translingual encounters (Solovova, Byram, Belyakova, Canagarajah, etc.). While defined differently across fields and scholars, such competence is generally viewed as the ability to step beyond one's own culture and function with other individuals from linguistically and culturally diverse backgrounds (Sinicrope et al., 2007).

As Paran and Sercu pose, school learning without direct contact with other cultures cannot lead to the development of intercultural competence (Paran & Sercu, 2010). International virtual projects allow students to develop it being engaged in real-life interactions with different nationalities. One of the examples is the International Conference Project on Global Issues held at Samara State Technical University (Russia) and Notre Dame College (U.S.). The goal of the project was to allow students to develop skills connected with various aspects of transnational communication.

As the project revealed, apart from Intercultural Competence, there are a number of other competences that are no less important when communicating in professional settings across nations and languages by means of networked media. As a result, the term Transnational Communicative Competences (TCCs) (Houston, 2017) emerged to better represent super-diverse networked transnational communicative realia and devise pedagogies and instructional methods to help students develop an array of competences to succeed in global interactions in English. As such, Transnational Communicative Competences need to be understood as four trajectories of transnational networked communication that occurs, predominantly, in writing. The four trajectories are cultural, rhetorical, linguistic, and spatial (Houston, 2017). Competence in each trajectory requires the development of a number of skills and strategies for successful communicative outcomes in each particular setting similar to the International Conference Project.

To systematize and better facilitate the development of TCCs in the four trajectories among project participants, we presented and defined each trajectory. Within the cultural trajectory, we made emphasis on the notion of "culture" as a multiple-level concept to help our students separate national culture from individual, group, identity, and others and focus more on the national cultures of their peers in order to sustain intercultural dialogue. Rhetorical, linguistic, and spatial trajectories were presented as bulleted below. The International Conference Project submerged us into daily analysis of live transnational encounters both successful and unsuccessful; we understood that the friction points that our students may experience need analyzed and addressed at the classroom level. Thus, we further focused on creating a systematic process for them to follow when they doubted the success of a communicative encounter.

According to Byram, to be communicatively competent in transnational encounters, interlocutors need to be ready to analyze friction points, emphasize with the other, synthesize the two sides in conflict and create an optimal solution based on the synthesis (Byram, 2005). When the students became good at recognizing and sharing friction points, we encouraged them to practice a systematic analytical approach to classify and properly address those:

1. Explain perceived friction point in a particular thread, comment, response, etc.
2. Classify the friction point into a transnational communicative competences trajectory for further analysis: A) linguistic (use of grammar, word choice, sentence structure, etc.); B) rhetorical (strategic choices to achieve communicative goals); C) cultural (lack of background to understand content); D) spatial (issues related to the usage of Facebook and its features). Classifying friction points at this stage allows for a more focused search for a viable strategy.
3. Discuss potential reasons that may have caused the friction points. Remember that there are differences among different languages as systems of meaning making, in ways we use language for different purposes and in different cultural groups and contexts.
4. Offer ways to synthesize the cultures/languages/rhetorics/spaces in conflict for a constructive communicative outcome. This step helps develop a behavioral competence to construct creative strategies for the sake of communicative success. Byram notes that synthesizing strategies may include nonverbal cues, translation tools, varying communication styles, conversational strategies, etc. (Byram, 2005).

The above process was applied in the consecutive weeks of the International Conference Project on Global Issues and proved to reduce frustrations of students. Notably, 65 % of participants in the exit surveys conveyed that they became more confident in handling various

communicative issues related to communicating across borders and learnt to devise strategies to foresee, handle, and even prevent those.

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SOCIETY. INTEGRATION. EDUCATION
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MODULAR APPROACH TO TEACHING AND LEARNING ENGLISH GRAMMAR IN TECHNICAL UNIVERSITIES

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Abstract. *The aim of this research is to find out the effectiveness of a modular approach in teaching and learning to assess students' performance, achievement and motivation and to decide if a modular approach is more effective than traditional methods while performing an experiment with two groups of students learning English at a technical university.*

The researchers consider a modular specification to be a technology in which the content is divided into a number of units or modules, each of which is examined separately. A module is considered to be a set of learning opportunities organized around a well-defined topic which contains elements of instruction, specific objectives, learning activities and self-assessment and evaluation using criteria-referenced measurement. This project combines quantitative and qualitative research methods to address the impact of modular teaching, learning and assessment on engineering students. The authors use a unique modular system and their own book on English Grammar.

This experiment shows that students of modular syllabuses find it useful and motivating and say that it encourages them to do better on the next modules. At the same time, modular learning and assessment does not remove the stress and workload of traditional approaches. Teachers in the modular system appreciate the better planning opportunity around the exams and the clarity of the focus of their teaching requirements. Still, the approach and the structure of modules used in the experiment requires improvement and development.

Keywords: *approach, education, foreign language, grammar, modular, self-independence, students, system, teaching, training.*

Introduction

In the XXI century Russia has been a part of the process of globalization and integration into the world economic, informational and educational environment. After the introduction of multi-level education system (Bologna process) young professionals have faced the challenges of performing their work effectively in the information society and coping with fundamentally new tasks. Education is the area that gives the opportunity to learn how to use modern

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technology in learning process, and then in professional sphere (Prauzner, 2015).

Expansion of contacts with foreign partners has had direct impact on the system of higher education. Sharing experience and beneficial cooperation with foreign colleagues is impossible without a rather high level of knowledge of foreign languages (FL). That is why in Russian Universities the process of reforming the educational system has gathered pace. The aim of this process is to endow university graduates with the foreign language communicative competence (Bagateeva, 2016).

One of the most effective technologies of teaching foreign languages is a modular approach. The aim of this research is to define the essence of the modular approach, to identify its key characteristics and principles, to consider the features of the modular approach for teaching grammar, to estimate the effectiveness of this approach in teaching foreign languages at technical Universities.

2 groups of methods have been used when conducting this research: theoretical and practical.

Theoretical methods include the analysis of scientific and methodological results and regulatory standard documentation on the topic of the research, comparison, systematization and generalization of Russian and international experience as well as lesson observation. These methods helped to formulate theoretical basis of the modular approach in teaching a foreign language, particularly grammar. Whereas practical methods include pedagogical testing, lesson observation, interviews, talks, pedagogical experiment and questionnaire survey. This group of methods was used for monitoring, systematization and estimation of practical results of applying the modular approach in teaching FL grammar (Bagateeva, 2016).

The object of the research is teaching a foreign language to students of a technical University (Bagateeva, 2016).

The subject of the research is the modular approach to teaching grammar in classes to students learning a foreign language at a technical University (Bagateeva, 2016).

The “Modular Approach” in Pedagogy

For the first time ever the modular technology was mentioned in scientific papers at the end of the 1860s. Then it was called the “Russian system” or the “Russian method”. This approach to teaching was based on “the identification of clearly described components of occupational skills (operations and actions) which were studied and brushed up element by element” (Erofeeva, 2012). Using this approach, the teacher could control the process of teaching a large

number of students at the same time. Further on, the modular approach was used extensively as an alternative to traditional education in 60-ies in the English-speaking countries of Europe and the United States (Bashmakova, 2014).

Theoretical basis of modular teaching at high school was most fully developed in the works of Lithuanian researcher P. A. Juceviciene. She clarified the concept of "module", formulated principles of modular teaching and developing modular programs. In the years that followed, the ideas of P. A. Juceviciene were extended by S. Ya. Batyshev, K. Ya. Vazina, V. M. Gareev, N. N. Surtaeva, T. N. Samova and other researchers (Kakurina, 2012).

The term "module", borrowed from computer science, has become firmly established in the basic vocabulary of pedagogy. There are many derivatives with the word "module": modular technology, modular method, modular approach, modular program, unit-modular and modular-rating technology. But in all these cases it is referred to the methodology based on the development of educational modules for different courses (Kakurina, 2012). As far as the "module" concept is concerned we have come across a great variety of definitions, both in foreign and Russian pedagogical literature.

For example, the founder of the modular approach P. A. Juceviciene defines the term as "an information block, including a logically complete unit of learning material, program of actions determined by a specific purpose, and a guidance for didactic objectives to be achieved" (Lapp, 2012). V. V. Karpov and M. N. Kakhtanov argue that a module is an "organizational and methodological interdisciplinary structure of educational material, providing semantic concepts definition in accordance with the academic knowledge structure. It structures information from the standpoint of cognitive logic of a would-be specialist" (Lapp, 2012).

Similar definitions were given by G. Owens and G. Russell. They emphasize the main characteristic of a module as a separate, comprehensive but flexible unit:

- "a module is a closed educational complex consisting of a teacher, a learner, material to be learnt and teaching technologies (Lapp, 2012);
- "a training package that covers conceptual unit of educational material and actions instructed for students" (Lapp, 2012).

In this study, we define the modular approach as a principle of teaching FL using independent, logically complete units into which the content of the discipline is divided (Kakurina, 2012). In contemporary pedagogy there are many definitions of the module, but, according to Yu. V. Lopukhova and M. V. Yurina, they can be divided into three groups:

- module as part of the Federal state educational standard of higher professional education, consisting of academic subjects specified by

the standard (Lopukhova & Yurina, 2017);

- module as an interdisciplinary structure that accumulates topics or units from different academic disciplines necessary for learning the same basic educational program (Lopukhova & Yurina, 2017);
- module as "organizational-methodical structural unit in the framework of the same academic discipline" (Lopukhova & Yurina, 2017).

With that in mind, we understand the term "module" as a complete unit of a particular academic discipline, contributing to the formation of students' one or several universal and professional competences stated in the basic education program (Iovleva, 2016). Each module always includes a sequential testing of students' knowledge and skills. A teaching module as a unit of the discipline content has a relative independence and integrity at the level of the education plan or curriculum and it determines the logic of learning process organization. The module is both a data bank and the guidelines to learning these data. The contents of a module must meet the requirements of the integrity, compactness, independence, clarity (Iovleva, 2016).

The use of the modular approach in the educational process contributes to the solution of the following problems:

- integration of Russian universities into the European educational system;
- improving the quality of the educational process;
- increasing independence of students when planning educational process and implementation of training programs;
- making students acquire and brush up decision-making skills in the process of studying the educational program (Lopukhova & Yurina, 2017).

The fundamental principles of the modular approach can be divided according to the vector of their types

1) a teacher;
2) a student.

The first group includes the principles that allow a teacher optimizing the process of teaching students:

- individual and differentiated approach to teaching that allows to adapt any module to the knowledge level of a particular student (Bagateeva, 2016);
- clear division of the discipline content into separate units (Bagateeva, 2016);
- a flexible approach to forming the content of each modular unit (Bagateeva, 2016);
- unambiguous and clear definition of goals and objectives of the

module (Bagateeva, 2016);
- using the most advanced pedagogical technologies and methods;
- checking student's knowledge of each unit module with the help of the fund of assessment tools developed specifically for a particular module.

The second group includes principles of the modular approach to teaching FL that are designed for students and enable them to learn the material most effectively:
- students' awareness of correlation between separate modules of the discipline as well as integrated perspective of training;
- strengthening of students' self-study efforts (Bagateva, 2016). As noted by authors «permanent education, whether through studying under someone's supervision, inspired self-education or self-study on one's own initiative, is becoming not only a necessity, but also a need» (Gil, 2015);
- intensive and detailed study of learning material;
- working out a list of supplementary literature for each module with aiming at in-depth study of the material (Bashmakova, 2014).

Structure of the Module

Further on, the structure of the module is to be considered. The module comprises two parts: cognitive (informational) and educational and professional (activities or practice). The objective of the first part is to equip students with theoretical knowledge, whereas the second part develops professional skills. The advantage of the modular teaching approach is that learners can independently study the proposed program, including goals, objectives, theoretical information, practical exercises and final tests (Bashmakova, 2014).

Two-part module structure has predetermined the number of its units. The module always starts with formulation of the integrating goal, which should ensure the achievement of the overall goal of learning FL. This part is followed by the information block, which explains the material being studied, after which all uses and examples are given. This unit allows to save time that otherwise would be spent on searching for the necessary material, and its content helps a teacher explain grammar rules.

The most important element of the modular approach is a multi-level system of control. The information block is followed by exercises of entry control, with the help of which the entry testing of knowledge and skills is performed to determine readiness of students to work independently. Given exercises should correspond to the logic of presenting theoretical material in the information block, i.e. to put theory into practice step by step. Thus, this unit as

well as the following units realize the principle of interaction between theory and practice required when learning a foreign language (Kandalova, 2016). This is followed by intermediate and final control testing. At the same time, intermediate and final control testing is conducted at the final reflective and analytical stage of the module. The results of this test can serve as finals, if a student has advanced at the desired level, and/or as entry, if the student plans to continue learning a foreign language (Danilina, 2014).

The fourth block is revision and testing of learned material. Its goal is to provide students with skills to put the theoretical material, presented in the information block, in practice. The fourth block focuses on the internalization controlled by consciousness, and on learning with the use of meaningful and logical memorization. In this regard, each exercise is preceded by recommendations concerning what specific aspect of grammar under study should be revised, and the particular paragraph of the information block is specified. It is aimed at a step-by-step meaningful and logical revision, which helps students navigate the information block. At the stage of revision students must understand how to work with the module (guides). For this purpose the given and following blocks include not only exercises but tasks for self-control and self-correction of acquired knowledge and skills as well.

The goal of the fifth block is to consolidate the material. Before passing on to this block students should be warned that for their further success it is necessary to know by heart the rules of formation and basic uses of grammatical forms being studied (Kandalova, 2016).

The last element of the module is the summary that generalizes completed tasks and systematize the knowledge. This block contains the structural and logical schemes for material generalization, exercises of generalizing character, the purpose of which is to identify the degree of mastering the module content. The summary can include not only exercises with keys but also tasks with no keys which requires the involvement of a teacher or a high-achieving student (Kandalova, 2016).

The number of elements in the module and its content are determined by the entry test and depend on the level of knowledge and specialty of each student. The student passes a modular block and a whole module to the teacher at their own pace of work on the material, it is done by means of entry, intermediate and final testing. One of the main advantages of the modular approach in teaching is that the time of working on the module is student-specific and it can take the most advanced students only 1-2 months to complete the module compared to 4-5 months of the semester within a framework of the traditional system of University education (Bashmakova, 2014).

Practical Part and Experiment

The key point of the modular approach to teaching is that a student learns the module to a greater extent on their own. Educators are involved only in organizing, advising and monitoring students' progress on educational material. It is the emphasis on a significant proportion of self-independent work that makes the modular approach optimal for studying FL grammar at a technical University in the conditions of reduction of classroom hours, intended for studying the discipline "Foreign language".

The Department of linguistics, intercultural communication and Russian as a foreign language at Samara State Technical University has performed an experiment on how the modular approach can be applied to studying FL grammar. 10 teachers of the Department and 124 first year full-time students of the Department of Industrial and Civil Construction participated in the experiment. During two semesters students studied grammar with the help of the Handbook on the basics of practical English grammar "English Grammar in Use", part I (authors: N. R. Belozerova, Yu. V. Lopukhova, L. V. Fedotova).

The manual consists of 16 modules (the verb TO BE, the construction THERE BE, THE PRESENT CONTINUOUS TENSE, THE PRESENT SIMPLE TENSE, PRESENT SIMPLE & PRESENT CONTINUOUS, THE PRESENT PERFECT TENSE, THE PRESENT PERFECT CONTINUOUS TENSE, THE PAST SIMPLE TENSE. THE PAST CONTINUOUS TENSE, THE PAST PERFECT TENSE, THE PAST PERFECT CONTINUOUS TENSE, THE FUTURE SIMPLE TENSE, THE FUTURE CONTINUOUS TENSE, THE FUTURE PERFECT TENSE, THE FUTURE PERFECT CONTINUOUS TENSE, THE PASSIVE VOICE). Each of these modules consists of 8-9 training blocks:

UB – 1 – contains the integrating goal of the module which is aimed at ensuring the achievement of the complex goal of the entire modular program for studying FL grammar.

UB – 2 – contains theoretical information about a grammatical rule (information block).

UB – 3 – contains exercises for entry control of students' knowledge and skills. If necessary it is possible to carry out the corresponding correction of knowledge.

UB – 4, 5 – contain exercises for revision and consolidation of covered material. Current and intermediate control is carried out at the end of each training element (this is soft control – self-control, pattern comparative check). The current and intermediate control is aimed at identifying gaps in knowledge and their timely correction.

UB – 6 – contains exercises when students must translate from Russian into

English.

UB – 7 – contains exercises when students must translate from English into Russian.

UB – 8 – summary. This academic block realizes the possibility of revision, generalization and systematization of the main content. (The generalization can be done not only verbally, but also in the form of comparative characteristics, graphs, diagrams).

UB – 9 – following up. Here is the final control. It identifies students' level of developed skills. It is recommended to analyze the obtained results. The grade will be given only for training exercises, based on the percentage of the number of mistakes to the number of answers:

100 % – 90% – “Excellent”;

91% – 80% – “Good”;

81% – 60 % – “Satisfactory”;

Less than 60% – “Unsatisfactory”.

At the beginning of each module a teacher informed students about the scope and structure of the module, and also mode of work on the module. The key point in the experiment is that before starting the modular Handbook the entry control testing was conducted. At the end of the year, students completed a final control testing. The results are presented in table 1.

Table 1 **Comparative results of entry and final testing**

Results of Testing	**Type of testing**	
	Entry Control Testing (%)	***Final Control Testing (%)***
“Excellent”	25	29
“Good”	51	60
“Satisfactory”	24	11
“Unsatisfactory”	0,00%	0,00%

As the table illustrates, the modular approach significantly improves the results of mastering FL grammar at a technical University.

Conclusion

Thus, in this paper, the relevance of using the modular approach in foreign language classes in a technical university was justified. The goal and tasks of the research were formulated and a methodological base was formed. In the main part of the article the main trends in understanding the modular approach were considered, the authors’ definition of this pedagogical technology was given. In addition, the basic characteristics of the module were identified and its structure

was determined.

In the practical part, a training manual on the modular approach to the study of Practical Grammar of the English language and an experiment on its use for teaching English at a technical university were described. At the end of the study, the effectiveness of the modular approach was assessed.

The results of the study show that the module approach in teaching is effective for improving students' knowledge. The module approach is found to be effective in teaching and enhances students' understanding and critical thinking.

Summary

As we live in a rapidly changing society, in the time of globalization, of impressive developments and great technological wonders, we have to find a way to adapt well to that using a new development, opening up new paths for learning and teaching. That means dealing with a modular approach in education.

Modular approach would be superior to traditional methods as the students' involvement and motivation would be increased. It would enhance their retaining capacity. It is to be considered as an alternative to traditional teaching methods for active participation and better learning of students.

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SOCIETY. INTEGRATION. EDUCATION
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STUDIJU PROCESA ORGANIZĀCIJAS OPTIMIZĀCIJA VALSTS ROBEŽSARDZES KOLEDŽĀ

Optimization of the Study Process Organization in the State Border Guard College

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Abstract. *The present paper explores specificity of educational process in the State Border Guard College as a militarized educational institution. It is specific and implementation of educational process in such institution is not possible without the successive and continuous organization of the study process. The correct organization of the study process and scientific content of the training program serves as a basis for development of the students' theoretical knowledge and practical skills and its structural and content organization is essential for the implementation of a qualitative educational process. The aim of the research is to identify the possibilities to improve the structural and content based organization of the study process of the State Border Guard College in order to facilitate the achievement of the goals set by the border guard training process. The study was conducted in the State Border Guard College using scientific, pedagogical and psychological literature analysis and evaluation and document analysis research method. The author brought forward conclusion that the structural and content study process improving in the State Border Guard College can be achieved by changing professional border guard training course program (1 month) and professional further education study program "Border Guarding", study subjects and their succession.*
Keywords: *organization, process, program, specificity, study, successive, training.*

Ievads
Introduction

Lai spētu profesionāli pildīt savus pienākumus, ikvienam topošajam robežsargam ir jāapgūst noteikts zināšanu un iemaņu daudzums, kurš turpmākajā darbā ir jāpapildina. Jo augstāks ir robežsargu izglītības līmenis, jo kvalitatīvākā ir Valsts robežsardzei deleģēto uzdevumu izpilde. Robežsarga izglītības līmenis ir ļoti lielā mērā atkarīgs no vairākiem faktoriem, kuri spēlē būtisku lomu robežsarga sagatavošanas procesā. Izglītības kvalitātes nodrošināšanā Valsts robežsardzes koledžā būtisku lomu spēlē izglītības iestādes specifika, jo Valsts robežsardzes koledža, atšķirībā no profesionālajām izglītības iestādēm, kuras ir

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Latvijas Izglītības un zinātnes ministrijas pakļautībā, atrodas Latvijas Republikas Iekšlietu ministrijas padotībā esošās iestādes – Valsts robežsardzes pakļautībā, kuras uzdevumā tiek gatavots personāls. Sakarā ar izglītības iestādes specifiku, specifisks ir arī tajā īstenotais studiju process, kura organizācija spēlē būtisku lomu robežsargu sagatavošanas procesā īstenoto programmu mērķu sasniegšanu. Korekta studiju procesa organizācija, tā struktūra un zinātnisks studiju programmu saturs kalpo par pamatu studējošo teorētisko zināšanu un praktisko iemaņu attīstībai.

Pētījuma mērķis ir apzināt studiju procesa strukturālas un saturiskās organizācijas pilnveides iespējas Valsts robežsardzes koledžā, izpētot īstenojamās izglītības programmas, lai veicinātu robežsargu sagatavošanas procesa mērķu sasniegšanu.

Lai sasniegtu pētījuma mērķi, tika izmantota zinātniskās, pedagoģiskās un psiholoģiskās literatūras analīzes un izvērtēšanas metodes un dokumentu analīzes metode, ar kuru palīdzību tika pētītas VRK īstenojamo izglītības programmu saturs, tēmu aktualitāte, atbilstība un pēctecība, kā arī šo programmu pilnveides iespējas. Pētījuma robežas: rakstā tiek analizētas robežsargu profesionālās sagatavošanas kursa (1 mēnesis) programma un profesionālās tālākizglītības programma „Robežapsardze".

Studiju process Valsts robežsardzes koledžā
Study process at the State Border Guard College

Valsts robežsardzes koledža ir valsts dibināta Valsts robežsardzes pakļautībā esoša izglītības iestāde (Valsts robežsardzes koledžas nolikums, 2006). Tajā tiek apgūtas tās nepieciešamās speciālās zināšanas un iemaņas, kuras ir nepieciešamas topošajam robežsargam. Tā realizē studijas, kas ir orientētas uz profesionālo zināšanu un prasmju apguvi un profesionālās kvalifikācijas iegūšanu un tās neietver akadēmiskā grāda standartu.

A. Indriksons (2017) raksturo Valsts robežsardzes koledžas kā vienas no militarizētas izglītības iestādes darbības specifiku šādi:

- Valsts robežsardzes koledža savā ikdienas darbībā vadās gan pēc speciālo, dienesta attiecības regulējošo, normatīvo aktu prasībām, gan arī pēc augstāko profesionālo izglītību reglamentējošo aktu prasībām, kuru vienlaicīga īstenošana rada problēmas.
- Dienesta gaitu reglamentējošie normatīvie akti ir primāri, tāpēc dienesta pienākumu izpilde ieņem centrālo lomu militarizētas izglītības iestādes darbībā attiecībā pret studiju procesu.
- Studiju process militarizētā izglītības iestādē tiek īstenots noteiktās hierarhijas un autoritārā vadības stila apstākļos, kur tādas dienesta organizācijas komponentes kā pavēles, reglaments un disciplīna rada

komunikācijas barjeras studiju procesā, kas būtiski traucē sekmīgai studiju procesa mērķu sasniegšanai.

- Militarizētā izglītības iestādes studiju procesā galvenokārt tiek pielietota tradicionālā izglītības pieeja, pielietojot „subjekts – objekts" komunikāciju studiju procesā starp docētāju un studējošo, kas tiek īstenota galvenokārt pavēļu formā bez atgriezeniskās saiknes, kas ir būtiska studiju procesa sastāvdaļa.
- „Subjekts – objekts" komunikācija un attiecības apgrūtina tādu studiju procesa mērķu sasniegšanu kā brīvas, atbildīgas un radošas personības attīstība, un tādu attieksmju un vērtību izpratnes veidošanos, kas nepieciešamas profesionālai izaugsmei.

Valsts robežsardzes koledžas darbības pamatvirzieni ir pirmā līmeņa profesionālās augstākās izglītības programmu izstrāde un īstenošana, izglītības procesa īstenošana, veicinot studējošo personības attīstību un studējošo sagatavošana dienestam Valsts robežsardzē, un tā personām pēc vidējās izglītības ieguves nodrošina iespēju:

- iegūt ceturto profesionālās kvalifikācijas līmeni, apgūstot pirmā līmeņa profesionālās augstākās izglītības programmu;
- iegūt trešo profesionālās kvalifikācijas līmeni, apgūstot profesionālās tālākizglītības programmu;
- apgūt Valsts robežsardzes funkciju izpildei nepieciešamās profesionālās pilnveides programmas (Valsts robežsardzes koledžas nolikums, 2006).

Studijām VRK tiek uzņemtas personas ar vidējo un augstāko izglītību, kurām tiek veikta fiziskās sagatavotības un veselības stāvokļa pārbaude, kas nosaka VRK kā militarizētas izglītības iestādes specifiku. Pēc sekmīgas pārbaudes tās tiek uzņemtas dienestā un nosūtītas uz studijām VRK. Topošā robežsarga karjera var attīstīties atkarībā no tā, kādu karjeras attīstības ceļu persona izvēlēsies – instruktora vai virsnieka, taču ikvienas studijas sākas ar robežsargu profesionālās sagatavošanas kursu (1 mēnesis), kurā ir šādi mācību priekšmeti:

- Robežsardzes dienests un taktika (60 stundas);
- Ieroču un šaušanas mācība – (28 stundas);
- Fiziskā sagatavošana – (10 stundas);
- Ierindas mācība – (14 stundas);
- Dienesta reglamenti – (14 stundas).

Šīs programmas mērķis ir sniegt priekšstatu par Valsts robežsardzes struktūru, dienesta organizācijas un darbības mērķiem, sniegt pamatzināšanas par šaujamieročiem, vispārējām iemaņām ierindā un sagatavot robežsargus mācībām profesionālās tālākizglītības programmā „Robežapsardze" (Robežsargu profesionālās sagatavošanas kursa programma „1mēnesis", 2017). Pēc sekmīgas

kursa programmas apgūšanas jaunie robežsargi turpina studijas profesionālās tālākizglītības programmā „Robežapsardze".

Studējošiem, uzsākot studijas militarizētā izglītības iestādē, ir jāsastopas ar vairākiem pedagoģiski psiholoģiskiem faktoriem, kas var atstāt iespaidu uz sekmīgu programmas apgūšanu, kā arī uz turpmāko studiju un dienesta turpināšanu.

Studiju procesa optimizācijas nepieciešamība
The necessity of optimization of the study process

Uzsākot studijas VRK kā militarizētā izglītības iestādē, studējošajiem ir jāpieņem jauna sociālā loma sabiedrībā – amatpersona (robežsargs), kas nozīmē atbildību, jaunus pienākumus un lielu psiholoģisko slodzi, un studiju procesā notiek vērtību sistēmas izmaiņas, iekšējās motivācijas veidošanās, intensīva profesionālu īpašību attīstība, kas veicina personības rakstura un intelekta īpašību veidošanos. Kā atzīmē A. Upmane, A. Gaitniece – Putāne, A. Šmitiņa (2016), būtisks faktors, lai veiksmīgi darbotos izvēlētajā profesionālajā jomā un nostiprinātu profesionālas identitātes izjūtu, ir arī indivīda personības atbilstība konkrētās profesijas kritērijiem. Studijas militarizētā izglītības iestādē saistītas ar sociāli psiholoģiskām pretrunām. Tās var izpausties kā pretruna starp studējošā tieksmi uz patstāvību un stingrām metodēm, tai skaitā disciplīnu, kas tiek pielietotas noteiktās profesijas speciālistu sagatavošanā; pretrunas starp studējošā intelektuālo un fizisko spēju attīstību, kas ir pamatprasība uzņemšanai militarizētā izglītības iestādē, kā arī pretrunas, kas saistītas ar lielu jaunas informācijas daudzumu, normatīvo aktu prasībām, militarizētas izglītības iestādes reglamentiem.

Jaunieši, kuri izvēlējušies robežsarga profesiju, izglītības ieguvi saista ar karjeru un nodarbinātību perspektīvā. Studiju laiks militarizētā izglītības iestādē galvenokārt sakrīt ar brieduma gadu pirmo periodu, kad notiek tādu personības īpašību attīstība un pastiprināšanās kā mērķtiecība, izlēmība, uzstājība, patstāvība un iniciatīva. Gandarījuma un apmierinātības sajūtu cilvēkam var sniegt darbs, kurā viņam ir iespēja īstenot savas spējas un potenciālu. Tas nodrošina cilvēka pozitīvu attieksmi pret savu darbu un darba pienākumiem, kā arī garantē augstu darba produktivitāti un kvalitāti (Karjeras izglītība skolā, 2009).

Lai studējošā mācību darbība būtu sekmīga, viņam ir jāizvairās no iekšēja diskomforta veidošanās. Studiju sākumposmā notiek psihisko procesu pārmaiņas, veidojas jaunas prasmes un iemaņas racionālā prāta spēju organizācijā, tiek apzināta nepieciešamība pēc izvēlētas profesijas, tiek izstrādāti optimāls darba režīms un profesijai nepieciešamās personības īpašības. Īpaši svarīgi šajā posmā ir pedagoģiski psiholoģiskie faktori (adaptācijas grūtības, pārāk augstas prasības,

pedagoga autoritāte, pārāk daudz informācijas, emocionālā spriedze, laika trūkums, konfliktsituācijas ar mācībspēkiem, motivācijas pazemināšanās nepareizu mācību metožu pielietošanas rezultātā).

Studējošajam, atnākot uz Valsts robežsardzes koledžu, ir jāsastopas ar vidi, kas ir krasi atšķirīga no iepriekšējās, un, kurai tiem ir jāadaptējas. V. Kunitskis (Kunitsky, 2010) norāda, ka studentu adaptāciju augstskolā var iedalīt kā profesionālo, t.i. pielāgošanos jauniem mācību apstākļiem, mācību saturam, jaunām prasībām un sociāli psiholoģisko, t.i. iekļaušanos formālās un neformālās sociālās grupās. E. Pauls un S. Briers (Paul, E. L. & Brier, S., 2001) norāda, ka jaunajiem studentiem, atnākot uz mācību iestādi, ir jāveido jauna identitāte, kā arī jāapgūst jaunas lomas un reizēm šis process ir pavadīts ar bailēm zaudēt iepriekšējo dzīves stilu. Jaunā sociālā loma – robežsargs liek jaunajam studējošajam apzināties, ka uzvelkot formas tērpu, viņš kļūst par valsts varas pārstāvi ar attiecīgi reglamentētu uzvedību, kas var būt atšķirīga no viņa iepriekšējās, un amatpersonas pienākumiem gan dienestā, gan arī ārpus tā. K. Rooks (Rook,1987) ir secinājis, ka studenti uzsākot studijas un zaudējot saites ar radiniekiem, tiek pakļauti stresam un depresijai. Reizēm šie faktori var kalpot par galveno iemeslu, lai pārtrauktu uzsāktās studijas. Kadetiem militarizētā izglītības iestādē ir jārēķinās ar ierobežotu tās teritorijas atstāšanas iespēju sakarā ar dienesta pienākumu izpildi (norīkojumi) un dienesta gaitu regulējošo normatīvu aktu prasībām (atrašanās izglītības iestādes teritorijā, lai nepieciešamības gadījumā iesaistītos dažādos pasākumos, kas saistīti ar dienesta pienākumu izpildi). Līdz ar to šis faktors ir nozīmīgs un raksturīgs tieši militarizēta tipa izglītības iestādēm.

Tā kā militarizētās izglītības iestādēs pastāv noteikts dienas režīms (sadale), kas ir reglamentēts speciālajos normatīvajos aktos (rīta rosmes, izvades, noteikts pusdienlaiks, patstāvīgais darbs, vakara junda, ieroču tīrīšana u.c.), studējošajiem ir jāadaptējas jaunajiem apstākļiem un jāpakārto savs mācību darbs un režīms jaunajiem apstākļiem, kādi līdz šim netika piedzīvoti. C. Čens (Chen, 1999) norāda, ka pārejā uz jaunu un atšķirīgu vidi un situāciju var izdalīt vairākas fāzes, kuru rezultātā notiek jaunās vides akceptēšana un pieņemšana kā profesionālās darbības nepieciešamība. Spēja adaptēties jaunajiem apstākļiem un iekļauties grupā ir ļoti nozīmīgs faktors, jo kopēju uzdevumu izpilde grupas sastāvā ir paredzēta gan ar speciālu normatīvu aktu palīdzību, gan arī, kā norāda pētnieki sociālās attiecības grupā rada studentam piederības sajūtu un palīdz risināt sociālās problēmas, kā arī ir resurss, lai pārvarētu vientulību un ilgas pēc mājām (Voitkāne, 2003).

C. Rufs (1989) norāda, ka pielāgošanās spēja ir saistīta ar psiholoģisko labklājības izjūtu. Militarizētā izglītības iestādē studiju procesa laikā studējošais sastopas ar situācijām, kuras netika piedzīvotas iepriekš (šaujamieroču lietošana, bailes no augstuma novērošanas tornī u.c.). Šādi pārbaudījumi rada viņam

paaugstināta stresa sajūtu, kas atstāj lielu ietekmi uz adaptācijas procesu izglītības iestādē. V. Kunitskis (Kunitsky, 2010) secina, ka var izdalīt arī tādas grūtības studiju adaptācijas posmā kā pārdzīvojumi par nepareizu profesijas izvēli, ko militarizētā izglītības iestādē pastiprina neziņas sajūta par nākotni, sakarā ar iespējamību pēc studijām tikt nosūtītam pildīt pienākumus uz struktūrvienību atkarībā no dienesta nepieciešamības un nevis no studējošo vēlmēm.

Ņemot vērā iepriekš minēto par pedagoģiski psiholoģiskiem faktoriem, uzsākot dienesta gaitu Valsts robežsardzē kā militarizētā institūcijā, un studējošajiem sastopoties ar militarizētas izglītības iestādes specifisko vidi, kas balstās un autoritārismu un piespiešanu mācīties, studiju sākuma posmā daudz svarīgāk ir orientēties nevis uz specifisku profesijai nepieciešamo zināšanu sniegšanu, bet gan uz robežsarga kā dienestā esošas militarizētas Valsts amatpersonas sagatavošanu efektīvai profesionālo funkciju izpildei. Taču šobrīd robežsargu profesionālās sagatavošanas kursā galvenais akcents tiek vērsts uz studiju priekšmeta „Robežsardzes dienests un taktika" apgūšanu, paredzot vislielāko stundu skaitu (60 stundas) no visas programmas apjoma (126 stundas), kas pamatojoties uz iepriekšminēto, nav lietderīgi.

Studiju procesa organizācijas optimizācijas iespējas
Optimization possibility of study process organization

Atbilstoši Izglītības un zinātnes ministrijas īstenotajām izglītības satura reformām, ir nepieciešams veikt izmaiņas pārējā no liela daudzuma informācijas apguves uz prasmi darboties ar informāciju, mācību satura integrācijā un saskaņošanā starp mācību priekšmetiem, novēršot tā pārblīvētību un saskaņošanu starp mācību priekšmetiem (Dzerviniks & Poplavskis, 2017). Kā norāda I. Degtjarjova (2010), studentu kompetences veidošanos ietekmē studiju procesa strukturālā un saturiskā organizēšana augstskolā: priekšmetu savstarpējā saskaņotība un pēctecība, mūsdienīga pieeja studiju satura veidošanā, docētāju un pārējā personāla attieksme pret darbu un savstarpējā cieņa, ētikas un kultūras tradīcijas augstskolā un apkārtējā vidē, studiju procesa saskaņotība ar sagaidāmo rezultātu.

Kā liecina D. Blūmas (2004) pētījums, mācīšanās uzlabošanu var panākt ar studiju kursa satura uzlabošanu. Lai optimizētu studiju procesu un veicinātu studiju procesa mērķu sasniegšanu, rodas nepieciešamība mainīt robežsargu profesionālās sagatavošanas kursa programmas (1 mēnesis) mērķi un saturu, šajā sagatavošanas kursa programmā paredzot tikai tādus militāros studiju kursus kā fiziskā sagatavošana, ierindas mācība, dienesta reglamenti un ieroču šaušanas mācība (ierobežotā apjomā, tikai pārliecinoties par spēju lietot šaujamieroci),

savukārt profesionālos un vispārizglītojošos studiju kursus pārceļot uz profesionālās tālākizglītības programmu "Robežapsardze".

Veicot izmaiņas un studiju sākuma posmā orientējoties uz robežsarga kā dienestā esošas militarizētas Valsts amatpersonas sagatavošanu efektīvai profesionālo funkciju izpildei, būtu iespējams veikt arī kvalitatīvāku kandidātu atlases procedūru, savukārt studējošajiem būtu iespēja jau šajā studiju posmā pārliecināties par izvēlētas profesijas atbilstību saviem uzskatiem un esošās militarizētas sistēmas specifiskās vides akceptēšanu kā profesionālās darbības nepieciešamību, lai turpinātu studijas Valsts robežsardzes koledžā un apgūtu profesionālās tālākizglītības programmu.

Profesionālās tālākizglītības programmas „Robežapsardze" mērķis ir izglītības procesa rezultātā sagatavot Valsts robežsardzes inspektorus dienesta pienākumu pildīšanai Valsts robežsardzes struktūrvienību inspektoru un jaunāko inspektoru amatos atbilstoši spēkā esošajiem normatīvajiem aktiem un Valsts robežsardzes uzdevumiem (Profesionālās tālākizglītības programma „Robežapsardze", 2016). Pēc sekmīgas robežsargu profesionālās sagatavošanas kursa pabeigšanas jaunie robežsargi uzsāk studijas, apgūstot profesionālās tālākizglītības programmu „Robežapsardze" un iegūstot vidējo profesionālo izglītību. Profesionālās tālākizglītības programmā „Robežapsardze" tiek īstenoti šādi mācību priekšmeti:

- Profesionālie – „Robežuzraudzība", „Robežpārbaudes", „Dokumentu tehniskā izpēte", „Imigrācijas kontrole" u.c.
- Militārie – „Militārā taktika", „Ieroču un šaušanas mācība", „Ierindas mācība", „Topogrāfija" u.c.
- Vispārizglītojošie – „Profesionālā svešvaloda", „Informātika", „Psiholoģija", „Pirmās palīdzības apmācība" u.c.

Studiju procesa laikā topošie robežsargi iegūst zināšanas un iemaņas, kuras būs nepieciešamas viņu tālākajā profesionālajā darbībā. Šīs iegūtās zināšanas, prasmes un iemaņas attiecīgajā nodarbībā turpmāk kalpo kā pamats sarežģītāka materiāla apguvē un bez šī pamata nav iespējama tālākā mācību procesa virzība, tādēļ plānojot studiju procesu, ir jābalstās uz iepriekš iegūtajām zināšanām un prasmēm. Taču Valsts robežsardzes koledžai kā militarizētai izglītības iestādei sakarā ar tās darbības specifiku un mērķiem, veidojot studiju gada plānus, ir jāņem vērā arī studiju kursu saturs, par prioritāriem izvirzot tos profesionālos studiju kursus, kuri jaunajiem robežsargiem pēc VRK absolvēšanās uzsākot savas praktiskā dienesta gaitas, kalpos par viņu profesionālās darbības pamatu. Kā pamata studiju kursi, kuri būtu jāīsteno studiju otrajā pusgadā pēc iespējas tuvāk viņu praktiskā dienesta uzsākšanai, būtu jāatzīmē „Robežpārbaude", „Dokumentu tehniskā izpēte" un „Robežuzraudzība". Teorētiskās zināšanas un praktiskās iemaņas šajos studiju kursos ļaus īstenot un realizēt Robežsardzei deleģēto pamatfunkciju - Valsts robežas neaizskaramības nodrošināšana un nelegālās

migrācijas novēršana, un personu tiesības pārvietoties no vienas valsts uz citu valsti, izpildi, kas ir minētas Robežsardzes likumā (Robežsardzes likums, 1997). Savukārt vispārizglītojošie studiju kursi ļaus šīs funkcijas un pienākumus veikt pilnvērtīgāk un kvalitatīvāk, taču izvērtējot prioritātes, tas ir sekundāri. Iepriekš minētais rada nepieciešamību veikt izmaiņas profesionālās tālākizglītības programmā „Robežapsardze", kur programmas sākuma īstenošanas fāzē tiktu paredzēta vispārizglītojošo priekšmetu īstenošana, kam sekotu profesionālo priekšmetu studiju kurss, ņemot vērā to, ka militārie mācību priekšmeti tiks apgūti robežsargu profesionālās sagatavošanas kursa programmas (1 mēnesis) ietvaros.

Secinājumi
Conclusions

1. Galvenās studiju procesa strukturālas un saturiskās organizācijas pilnveides iespējas Valsts robežsardzes koledžā ir panākamas, veicot izmaiņas īstenojamo studiju programmu saturos.
2. Robežsargu sagatavošanas sākuma posmā nepieciešams orientēties uz robežsarga kā militarizētā dienestā esošas amatpersonas sagatavošanu, nevis jaunu, fundamentālu un specifisku profesijai zināšanu sniegšanu.
3. Ir jāveic grozījumi robežsargu profesionālās sagatavošanas kursa programmas (1 mēnesis) saturā, mainot tās mērķi un paredzot tajā tikai tādus militāros studiju kursus kā fiziskā sagatavošana, ierindas mācība, dienesta reglamenti un ieroču šaušanas mācība (ierobežotā apjomā, tikai pārliecinoties par psiholoģisko spēju lietot šaujamieroci).
4. Ir jāveic saturiskas izmaiņas profesionālās tālākizglītības programmā „Robežapsardze", iekļaujot tajā mācību priekšmeta „Robežsardzes dienesta un taktika" paredzētās tēmas no robežsargu profesionālās sagatavošanas kursa programmas (1 mēnesis).
5. Ir jāveic strukturālas izmaiņas profesionālās tālākizglītības programmā „Robežapsardze", kur programmas sākuma īstenošanas fāzē tiktu paredzēta vispārizglītojošo priekšmetu īstenošana, kam sekotu profesionālo priekšmetu studiju kurss, ņemot vērā to, ka militārie mācību priekšmeti tiks apgūti robežsargu profesionālās sagatavošanas kursa programmas ietvaros.
6. Kā pamata studiju kursi, kuri būtu jāīsteno un jāplāno studiju otrajā pusgadā pēc iespējas tuvāk viņu praktiskā dienesta uzsākšanai, ir „Robežpārbaude", „Dokumentu tehniskā izpēte" un „Robežuzraudzība".

Summary

The State Border Guard College is a militarized educational institution, therefore the study process is specific and different from other educational institutions. The specifics of the

study process in a militarized educational institution is mainly related to the presence of lecturers and students in the service relationship, and during the pedagogical process students have to acquire knowledge and practical skills in the conditions when the study process must be balanced with the practical service. The organization of the study process plays an important role in achieving the objectives of the programs implemented in the process of preparing border guards, its structure and scientific content of the study programs serve as the basis for the development of students' theoretical knowledge and practical skills. As a result of the research, it was concluded that the possibilities of improving the structural and content of the study process in the State Border Guard College can be achieved by changing professional border guard training course program (1 month) and professional further education study program "Border Guarding", study subjects and their succession, at the beginning of the study focusing on the preparation of a border guard as an official in a military service, rather than providing new fundamental knowledge. Subject „Border Guard Service and Tactics" from professional border guard training course program (1 month) has to be integrated in the professional further education study program "Border Guarding" and in this program it is necessary make the structural changes.

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ADOPTING 21ST CENTURY COMPETENCIES FOR A TECHNICAL UNIVERSITY CURRICULUM

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Abstract. *Russian universities are involved in the global process of rethinking and remodelling of the higher educational system. They are expected to provide their students with a wide variety of skills, which are often referred to as "21st century competencies". Such skills as critical thinking, decision making, the ability to communicate effectively and solve problems through negotiation and collaboration are needed for success in study and careers. For the universities it means growing importance of making curriculum relevant, helping students learn how to teach themselves, and fostering creativity. This article explores the quality of learning in the Russian technical university and concludes that the current pedagogy has not adapted yet to address the challenges of the twenty-first century. The traditional approach, based upon a teacher-centred focus on rote learning still prevails. Through this research it was found that there are different pedagogical approaches that could develop different 21st century competencies by technical students. The article concludes with a discussion around some innovative teaching methods that make lessons more student-driven and motivating.*
Keywords: *21st century competencies; higher education; global competencies; curriculum; quality of learning; technical university; pedagogical approach; teaching methods.*

Introduction

We live in the time of rapid and fundamental changes in society. Globalization, economy transformation, technology advancements have all contributed to a future which is volatile, uncertain, complex and ambiguous. To the younger generation, "all these have created new opportunities to breaking away from the conventions, find their own selves, explore new possibilities, and identify new ways of serving society. They are emerging as a new generation with new meaning of life, living with new aspirations. They look forward to education of a different kind" (Cheng, 2017).

The primary goal of the modern education system is to enable students to develop the knowledge, competencies, and characteristics that will lead them to become personally successful, economically productive, and actively engaged citizens. Though problem solving and critical and creative thinking has always been at the core of learning and innovation, the new in the 21st century is the call

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for education systems to emphasize and develop these competencies through intentional changes in curriculum design and pedagogical practice. The goal of these changes is to prepare students for solving complex problems – including problems we don't yet know about – associated with living in a competitive, globally connected, and technologically intensive world.

This paper will raise some questions about these changes, such as 1) what are the 21st century competencies, 2) how can curriculum and instruction be designed to meet the 21st century needs, and 3) what pedagogical approaches and teaching methods can be used to enhance both learning content and competencies?

Research Methodology

The research paper employs the method of literature review which is an account of what has been published on a topic by accredited scholars and researchers. In writing the literature review, the purpose is to convey to the reader what knowledge and ideas have been established on a topic. As a piece of writing, the literature review is defined by a guiding concept (Taylor, 2010). The performed steps of the literature review were as follows: (1) organizing the literature selection and review by relating it directly to the research question the authors develop; (2) synthesizing results into a summary of what is and is not known; (3) identifying areas of controversy in the literature.

Challenges of the information age society

The education reforms in Russia have to begin by trying to identify the characteristics of a successful young person in the 21st century and therefore define the expected competencies that would be required and link them to the core values of the society. Today's curricula do not fully prepare students to live and work in an information-age society. Although reading, writing, mathematics and science are cornerstones of today's education, curricula must go further to include competencies such as collaboration and digital literacy that will prepare students for 21st century employment. There has been a significant shift in economy from manufacturing to information and knowledge services. Knowledge itself is growing ever more specialized and expanding exponentially. Information and communication technology is transforming the nature of how work is conducted and the meaning of social relationships. Decentralized decision making, information sharing, teamwork, and innovation are the key in today's enterprises. No longer can students look forward to middle class success in the conduct of manual labor or use of routine skills – work that can be accomplished by machines. Rather, whether a technician or a professional person, success lies in being able to communicate, share, and use information to solve complex problems, in being able to adapt and innovate in response to new demands and changing circumstances, in being able to expand the power of technology to create

new knowledge, and in expanding human capacity and productivity. Still, the education system in Russia encouraged the students to know much and the training was aimed at the accumulation of knowledge. The era of industrialization, of the conveyor work, when people were hired to make relatively simple repetitive work is left. Now all these routine operations can be executed automatically through robotics and digital technology. And this means that people now must be taught not as they were taught before; we need to teach them the ability to think independently, to obtain information and to evaluate it critically, and not just to accumulate and remember.

The curriculum should first accommodate the teaching of these competencies within the traditional disciplines, and then gradually move from the content of a subject to the developing of competencies and personal qualities of students. It will be difficult to change the traditional curriculum immediately, it should be done gradually, first by changing how and what is taught within these traditional disciplines. Some experts argue that the concept of "profession" will disappear in the near future. It will happen because of the project and task approach that highlights not the set of skills and competencies that one possess, but the ability to rebuild these every time for a specific task.

21st century competencies: definition and classification

Speaking about 21st century competencies, we'd like to start with their definition. Similar conceptual understandings of the competencies are reflected in the frameworks developed by the following: Assessment and Teaching of 21st Century Skills, Organization for Economic Co-operation and Development, Partnership for 21st Century Skills, Canadians for 21st Century Learning, International Society for Technology in Education, European Commission as well as a large number of researchers all over the world. Fortunately, groups developing conceptualizations of 21st century competencies have built sufficiently on each other's ideas to avoid speaking a different language about the same topic.

We define nine 21st century competencies into four broad categories: knowledge, skills, attitudes, values and ethics (see Table 1).

The most prominent 21st century competencies are critical thinking, problem solving, communication, collaboration, and creativity and innovation.

Problem solving has become a key component for workplace success in an economy that demands flexibility and innovation instead of repetitive manufacturing tasks. It requires goal-directed thinking in situations where no explicit solution is available. The student has a more or less well determined goal, but does not instantly know how to reach it.

Table 1 **21st Century Competencies**

Ways of thinking (*knowledge*)	**Ways of working (*attitudes*)**
- Creativity and innovation; - Critical thinking, problem solving, decision making; - Learning to learn, metacognition (knowledge about cognitive processes).	- Communication; - Collaboration (teamwork).
Living in the world (*values and ethics*)	**Tools for working (*skills*)**
- Citizenship - local and global; - Life and career; - Personal and social responsibility - including cultural awareness and competence.	- Information and communication technology (ITC) literacy.

A second, often discussed area of desirable analytical competency is *critical thinking*. It is described as the "ability to design and manage projects, solve problems, and make effective decisions using a variety of tools and resources" (Fullan, 2013). Thinking critically requires students to "acquire, process, interpret, rationalize, and critically analyze large volumes of often conflicting information to the point of making an informed decision and taking action in a timely fashion" (C21, 2012).

Competency in the realm of *communication* is seen as a necessity for success in the job market, regardless of level of education or type of work. This competency refers the efficient use of language, computation and other mathematical skills, in different situations. It is a requisite tool for being well in society and the workplace and to conduct effective dialogue with others.

Collaboration in the 21st century context requires the ability to "work in teams, learn from and contribute to the learning of others, use social networking skills, and demonstrate empathy in working with diverse others" (Fullan, 2013). Collaboration also requires students to develop collective intelligence and to co-construct meaning.

Creativity is often described as the pursuit of new ideas, concepts, or products that meet a need in the world. *Innovation* contains elements of creativity and is often described as the realization of a new idea in order to make a useful contribution to a particular field. Creativity includes concepts of "economic and social entrepreneurialism . . . and leadership for action" (Fullan, 2013). Creativity in schools gives "students experiences with situations in which there is no known answer, where there are multiple solutions, where the tension of ambiguity is appreciated as fertile ground, and where imagination is honoured over rote knowledge" (Upitis, 2014).

A person who possesses the 21st century competencies, is:

- a confident person who has a strong sense of right and wrong, is adaptable and resilient, knows himself, is discerning in judgment, thinks independently and critically and communicates effectively;
- a self-directed learner who questions, reflects, perseveres and takes responsibility for his own learning;
- an active contributor who is able to work effectively in teams, is innovative, exercises initiative, takes calculated risks and strives for excellence;
- a concerned citizen who is rooted to Russia, has a strong sense of civic responsibility, is informed about Russia and the world, and takes an active part in bettering the lives of others around him.

So, the primary goal of the modern Russian education system is to enable students to develop the listed competencies, skills, and characteristics that will lead them to become personally successful, economically productive, and actively engaged citizens. Teachers should apply different strategies and methods for teaching these competencies because there is not one specific strategy or model to achieve this goal. Teachers play a significant role in helping students develop 21st century skills by applying methods that increase students' abilities. They should use "innovative strategies and modern learning technologies that help integrate cognitive and social skills with content knowledge as well as increase student participation in the learning environment in order to promote these future skills" (Alismail & McGuire, 2015).

The current state of the Russian education system

Today's curriculum at the Russian technical university is a set of basic and special technical disciplines that are taught using traditional subject-oriented approach. This kind of teaching is so far a job training. Students acquire knowledge which is often not connected with the real world, with the current needs and demands of the employer, with the current state of technology. The teacher remains a transmitter of certain knowledge, not an educator who uses personalization, collaboration and communication as core strategies for developing learners' competencies. In this traditional approach, a teacher teaches the content by repetition, making students say or write the same thing over and over again which makes class less interesting. This model is based upon a teacher-centered focus on rote learning, requiring students to memorize a large amount of information in order to expand their knowledge. The technical university curriculum doesn't even provide an introductory course of Academic Skills that equips students for full participation and engagement with their studies by building awareness and understanding of the core values and expectations of academic culture. The current pedagogy has not adapted yet to address the challenges of the twenty-first century. However, "the process of reforming

schools and learning does not imply an immediate overhaul of the curriculum or the transformation of schools and classrooms with new technology and organizational schemes. Instead, the first priority is to ascertain what elements should be removed from an already over-burdened curriculum (e.g. less relevant knowledge), before embedding new competencies and skills or transforming the way class time is used" (Scott, 2015). There are a number of effective, research-based curriculum models capable of guiding twenty-first century learning (Sternberg & Subotnik, 2006; Ackerman & Perkins, 1989; Trilling & Fadel, 2009; Tucker & Codding, 1998). One of them is focused on fostering learners' capabilities, others propose the teaching of "thinking skills … as a "meta-curriculum" interwoven with traditional core subjects" (Ackerman & Perkins, 1989) or a thinking curriculum – "one that provides a deeper understanding of the subject and the ability to apply that understanding to the complex, real-world problems that the student will face as an adult" (Tucker & Codding, 1998). Choosing any alternative Russian curriculum developers have to keep in mind that it should focus on the construction of knowledge and encourage students to produce the information that has value or meaning to them in order to develop new competencies. Developing curriculum that will be connected with the real world is important for support of students' participation, their motivation and understanding for the academic subjects, as well as preparing them for career (Lombardi, 2007). Also the curriculum developers must take into consideration that educational goals and teaching methods must be developed in order to provide students with competencies needed in the future.

New pedagogical approaches for 21st century competencies development

There are many pedagogical techniques and methods that deepen both knowledges and skills while also allowing students to participate in real life.

A very valuable approach is problem-based learning. Students are encouraged to discuss and analyze different issues and topics that are related to the real life and connected to the subject content. This method allows students to "investigate problems, provide explanations, generate ideas, analyze data, and make judgments in order to find the appropriate solution" (Alismail & McGuire, 2015). Problem-based learning increases students' participation in class activities and enhances critical thinking skills (Joyce et al., 2009). Some studies show a significant correlation between problem-based learning activities and the critical thinking skills (Drew, 2013). Trilling and Fadel (2009) defined critical thinking as the ability to analyze, interpret, evaluate, summarize, and synthesize information (Trilling & Fadel, 2009). This approach "allows students to learn through creative thinking and break through thinking barriers in order to achieve unique, 21st century learning competencies. When teachers applied this strategy, they supported students' capacities in critical thinking, self-directed learning and cooperation, as well as social interaction" (Knowlton, 2003).

The next method that allows to develop 21st century competencies is cooperative learning. It combines students with diverse abilities and interests into working groups, and has a significant impact on learning (Alismail & McGuire, 2015). The work in groups is more creative because of the consolidation of students' diverse strengths, skills and knowledges in order to achieve a result. (Knowlton, 2003). Trilling and Fadel (2009) noted that the group work can reinforce mutual respect between team members and efforts toward compromises needed to achieve a common goal (Trilling & Fadel, 2009). Furthermore, cooperative learning has a positive effect on students' performance and motivation (Joyce et al., 2009). The very popular forms of cooperative learning are projects, problems, design and researched-based learning.

An example of a time-proven cooperative learning technique is the Jigsaw Classroom that reduces racial conflict, promotes better learning, improves student motivation, and increases enjoyment of the learning experience. The students are divided into 5-person groups, diverse in terms of gender, race, and ability. The day's lesson is also divided into 5 segments so that each student learns one of them. Students from each jigsaw group assigned to the same segment form temporary "expert" groups to discuss the main points of their topic. After they are back into their jigsaw groups they present her or his specialty to the group and the others can ask questions for clarification. Students are then tested on what they have learned.

Another innovative approach is the technology of flipped classroom. Basically the concept of a flipped class is described by its authors, Jonathan Bergmann and Aaron Sams as following: "that which is traditionally done in class is now done at home, and that which is traditionally done as homework is now completed in class" (Bergmann & Sams, 2012). The advantages of this model are:

- Flipping helps struggling students;
- Flipping helps students of all abilities to excel;
- Flipping allows students to pause and rewind their teacher;
- Flipping increases student–teacher interaction;
- Flipping increases student–student interaction;
- Flipping changes classroom management (Bergmann & Sams, 2012).

At the Samara State Technical University we have experience of combining these two techniques during foreign language classes. At the same time the approach described below is an example of a problem-based learning.

The topic 'Education' includes not only traditional subthemes as education in Russia and abroad, our university, students' life, but also covers the questions of academic mobility, international student contacts, grants, scholarships for students in Russia and abroad. Using the "flipped – jigsaw classroom" we invite the 4-5 person groups of students to study the Internet presentations of the major European and international organizations in the field of grant support and

academic mobility of students. Each group has one organization and a questionnaire to complete (one question for one student in group):

- General information (location, history, short profile);
- Study programs;
- Language requirements;
- Funding for foreign students;
- Applying for a study program etc.

In class, each group presents its organization, its pros and cons for Russian students. As a result of joint discussion, students select two or more most interesting organizations. For the next lesson, new groups are formed according to the organization choice. Students are asked to find the application package of their organization and to make an instruction for application procedure (one program detail for one student), including deadlines, application criteria, scholarship value etc.

For the next step students are to form smaller groups of 3 persons to work with a letter of motivation. The content of the letter is divided into 3 segments: facts about your education, skills and knowledge; academic motivation; reasons for applying for a scholarship. After the discussion in "expert" groups, there is a final version of every segment of the letter that may be used as a sample if students decide to complete the real application.

It should be noted that the language component of the lesson is also covered by the rich authentic language material that students select by themselves working in Internet or proposed by the teacher.

The result of this approach is the development of critical thinking in forms of analyzing, interpreting, evaluating, summarizing, and synthesizing information, the development of information and ITC literacy, collaboration and communication, the participation of every student in class activities, the work with the topics that are related to the real world etc.

Summary

Today's education should focus on both core academic subject mastery and 21st century competencies development. The main task of the 21st century curriculum is to incorporate them (competencies) into the educational standards that every student could be able to develop them by the end of compulsory schooling. The Russian educational system makes the first steps towards the curriculum improving. It is not possible and not necessary to fully overhaul it immediately, but step by step moving towards wider application of modern pedagogical approaches allowing prepare students who are able to deal with the complex challenges of our world.

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A SUPPORTIVE LEARNING ENVIRONMENT, THE CREATION OF IT AS AN EDUCATIONAL FACTOR: AN ANALYSIS OF TEACHERS' AND STUDENTS' ATTITUDE

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Abstract*. This article presents a study, an analysis of teachers' and students' attitude toward the concept of a learning environment, elements of the development of it, the accountability for creating a supportive learning environment, by revealing an educational effect of it on student relationships and on outcomes of studies and learning. The research is aimed to answer the main problematic question: how do teachers and students perceive a learning environment, its elements, the creation, accountability for a supportive learning environment, what kind of educational effect may it have? The article consists of an introduction, study design, research results, conclusions, and references. The empirical study shows that teachers and students have quite a clear understanding of the concept of a learning environment, however, both groups under study (teachers and students) construe various learning environments, elements of their creation, accountability of actors for creating and maintaining the environments in a different way. In spite of some differences in attitudes of teachers and students, both groups of respondents acknowledge the fact that a learning environment has an educational effect on interrelationships of students, outcomes of learning and studies. It has to be assumed that observations made in this research can be used in the teaching practice so as to better understand contemporary students, relationships between teachers and students, as well as the formation of students' positive attitudes toward learning activities and communication.*
Keywords: *learning environment, its elements, creation, interpersonal relations of students.*

Introduction

Thinking about a man of today in a learning society, adult education, lifelong learning, and studies, we often have to deal with a concept of a *learning environment*, or, a *supportive learning environment*. This concept is common among scholars, practitioners, and politicians. In particular, when it comes to the quality of studies, learning, education, outcomes, results of learning. However, authors are forced to acknowledge that there sometimes a misunderstanding

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occurs, since the concept of a *learning environment* is multidimensional, which complicates communication among education theorists, practitioners, politicians, teachers, and students. It has to be assumed that the concept of a *learning environment* came into use of spoken language before it was theoretically grounded. This phenomenon has created a certain semantic confusion in our communication. This has been an inducement to the author of the article to go deep into the concept and to launch this research. The *goal of research* is to analyse an attitude of teachers and students toward the concept of a learning environment, elements of its development, accountability for creating a supportive learning environment, through revealing its educational effect on interpersonal relationships of students, outcomes of studies and learning.

Though scientific literature does not provide an unambiguous answer to what a learning environment is, it always emphasises its significant role in quality learning and interpersonal relationships. There can be certain matching observed in various definitions of the concept of a *learning environment*:

- A *learning environment* is defined as a place or a space in which learning occurs (Trakšelys & Martišauskienė, 2013; Mozalta, 2017; Lipinskienė, 2002; Blandin, 2008; Bullard, 2016; Brazdeikis, 2009 et al.);
- A *learning environment* is a dynamic interaction of four factors: a learner (who?), a teacher or other educational specialists (with whom?), a content of learning (what do they learn?), facilities and technology (where, by means of what?). besides, thus interaction implies various learning theories used by practitioners, as well as their educational activities (Dumont, Istance, & Benavides, 2010; Tolutienė, 2013; Dumont, Istance, & Benavides, 2010; Jatkauskienė, Andriekienė, & Trakšelys, 2014, et al.);
- A *learning environment* consists of three main aspects: a) learning goals, b) the division of teacher and learner roles, and c) the roles of the learners in relation to each other and a school culture (De Kock, Sleegers, & Voeten, 2004; Jensen, 2001; Lipinskiene, 2002; Brazdeikis, 2009; Tuit, Haynes, Stewart, & Patton, 2016; Joseph, Haynes, & Cobb, 2015, etc.);
- A *learning environment* has certain dimensions: a learner's (micro) level, an organization‘s (mezzo) level, and a country‘s (macro) level (Blandin, 2008; Jatkauskienė & Andriekienė, 2013, et al.);
- A *learning environment* can be of different types: educational, psychological, material, physical, intellectual (Jucevičienė, 2010; Lipinskienė, 2002; Fisher, Frey, Quaglia, Smith, & Lande, 2017; Grigaliūnaitė, 2002; Kuklauskas & Kuklauskienė, 2012; Starnge &

Banning, 2015; Nilson & Goodson, 2017; Hung & Zhang, 2008, et al.)

- An emphasis in the *learning environment* is placed on activities that allow constructing the understanding and developing the skills necessary to solve various learning problems (Barkauskaitė & Motiejūnienė, 2004; Kišonienė & Dudzinskienė, 2007; Bullard, 2016, et al.);
- There are supportive or unsupportive learning environments (Jatkauskienė & Andriekienė, 2014, etc.). A supportive learning environment is a conditionally stable and typical emotional state, which is formed in members of an organisation while working and collaborating (Guščinskienė, 2009: p. 158).

As a brief review of the literature suggests, the problem of a learning environment is increasingly being analysed from a scientific point of view. That is understandable – while an attitude toward learning, its goals, content, technologies, subject of learning, object, etc. is changing, an attitude toward an environment in which a learning process takes place should change, too. On the other hand, a learning environment is increasingly being argued to be enabling. In this context, the enabling is understood as a process in which people or communities develop their ability to manage their lives and to address important issues in their lives. Therefore, it is natural that the modern learning environment of a university should be of not less concern than other components of the didactic system.

Implementation of the concept of lifelong learning stimulates not only individual but a group learning as well. In this connection, relationships between a group of learners and aspects of harmonisation thereof emerge. An analysis of scientific literature on the concept of a *learning environment* allows suggesting that that there is a direct relationship between an *environment supportive for learning* and *interpersonal relations of the group of learners*, as some authors argue. The researchers of harmonisation of mutual relations and elements of a supportive learning environment, such as: D. Jonassen, S. Land, M. Thomas (2012), C. C. Strange, J. H. Bannig (2015), F. Tuitt, C. Haynes, S. Steward (2016) et al., emphasise that learning is a dialogue, a community that is important for achievements of students, while a developed learning environment, supportive for the harmonisation of interpersonal relationships, is an intellectual and social development of learners. Thus, the following *hypothesis* is suggested in this study: a supportive learning environment, the creation of it can be one of the main educational factors for the harmonisation of mutual relations in the group of learners and for the outcomes of studies and learning. The following main *problematic question* has been raised in order to verify the hypothesis: how do teachers and students perceive a learning

environment, its elements, the creation, accountability for a supportive learning environment, what kind of educational effect may it have?

To answer the above problematic question, a number of partial questions have been framed as follows:

1. What is the attitude of teachers and students toward the concept of a supportive learning environment and does it differ?
2. What is the attitude of teachers and students toward the accountability for creating and maintaining a supportive learning environment and how does it differ?
3. What is the attitude of teachers and students toward the elements of developing a supportive learning environment and how does it differ?
4. What is the attitude of teachers and students toward mutual relations and harmonisation thereof in the creation of a supportive learning environment, how does it differ?

Respectively and in accordance with the partial questions, findings are presented below.

Theoretical and practical implications of the research: the authors found no previous studies that would reveal teachers' and students' perception of learning environments, the creation of them and the educational effect there of on student relationships, outcomes of learning and study. The findings of the research might presumably be used as specific recommendations for improving teachers' didactic practices, ensuring more effective internal and external communication, better understanding of contemporary students, their learning needs, etc.

Study Design

Based on the ideas of the supportive learning environment and harmonisation of learners' mutual relations, that more pronounced during the review of the scientific literature, the following theoretical and methodological provisions were taken into consideration when designing the empirical research:

- European *liberal education paradigm*, where learning is construed as an assistance for learners in their self-actualisation and self-fulfilment processes, a primary focus on a personality, on the intense development of a person's basic skills and competences, and on the training of a professional for work activities;
- A *human learning theory* as the most appropriate formulation of the *liberal education paradigm*. This theory emphasises the integrity of each person necessary for fulfilling oneself as a personality (Rogers, 1969), in particular, for the self-actualization of personal potential

(Maslow, 1962). The key principle of the theory is a human's pursuit to realise oneself in full and to assume responsibility for personal development;

- *positivist epistemology of empirical research*, characterised by the belief that a social phenomenon can be empirically studied on the basis of partially known facts, by suggesting hypotheses about the interrelation of such facts, which are thereafter subject to verification, validation or disproval (Rupšienė & Rutkienė, 2016).

The study has been conducted *in two phases*. The first phase took place in 2016-2017 and involved the analysis of scientific literature, written questionnaire of teachers of educology, andragogy study programmes (n=168) in Lithuanian universities (Klaipeda University, Šiauliai University, Vytautas Magnus University, Lithuanian University of Educational Sciences, Vilnius University, Kaunas University of Technology) (total number of academic staff in educology and andragogy study programmes is about 440 persons with Doctoral and Master's degrees in social sciences) in order to find out: their attitude toward the concept of a supportive learning environment, individuals accountable for the creation of supportive learning environments, the elements of developing such environments, educational effect of the learning environments on studies, learning process and the harmonisation of interpersonal relations. The second phase of the study was held in 2017 by using the same survey tools and involved a survey of students of the first and second degree in educology and andragogy study programmes of Lithuanian universities (n=273). Such a statistical population is based on the authors' belief that prospective educators and andragogues should be well aware of what a *learning environment* means. According to the data provided by the Ministry of Education and Science of Lithuania on 1 October 2017, a total of 824 future educators and andragogues studied at Lithuanian universities who took part the first and second phases of the research. A sample size was determined in accordance to the formula $n=1/(\Delta 2+1/N)$, where n is a sample volume, N - population size, Δ-error (5-10 % is advisable). Upon applying the error, the sample volume selected (n=273, a group of students) and (n=168, a group of teachers) is considered as appropriate. The completed questionnaires show that 89 % of female took part in the survey. The group of teachers was mostly made up of people between the ages of 45 and 55. The average age of the student group was 24 years old. The survey tool, questionnaire, was developed by the authors based on the supportive learning environment parameters, that were established in the process of analysing the scientific literature, as well as the ideas for harmonisation of relations within a group. So as to measure elements of a supportive learning environment, the creation thereof as an educational

factor for the harmonisation of relationships within the student group, rank and nominal measuring scales have been applied. The obtained data was analysed by means of the SPSS platform (version 20) through *statistical methods of data analysis*: descriptive statistics, parametric and nonparametric criteria for assessing differences between teacher and student groups, whereby substantial differences between the estimates of the two groups of survey were identified. They are presented in the following sections of the article.

Results of the Research and Discussion

1. The attitude of teachers and students toward the concept of a supportive learning environment

The first question of research: What is the attitude of teachers and students toward the concept of a supportive learning environment and does it differ? Given the fact that a supportive learning environment is defined as a multidimensional object, there are several learning environments: *educational, psychological, material (physical), and intellectual*, exactly whereat differences in the attitudes of teachers and students were sought. Respectively and based on the above different learning environments (*educational, psychological, material (physical), intellectual*) findings of the research are herby presented.

1.1. Differences in the attitude toward the concept of an educational learning environment

According to P. Jucevičienė (2010), it is worthwhile today fostering a dialogue of perceptible learning environments that have quite a diverse potential to transform into learning environments that are specific to a certain kind of individuals and which are built by teachers or andragogues. There are natural or artificial educational learning environments. The above author lists the following dimensions of the educational environment: *learners' interrelationships, commitment to learning, workload, and learning methods*. It was, therefore, important to find out how respondents understood the educational aspect of a learning environment.

By applying the Kruskal-Wallis test, the following statistically significant differences in the teachers' and students' perception of educational environment have been identified:

Table 1 **Differences in the teachers' and students' attitude toward the concept of an educational environment**

Variables of educational environment	Group	Average ranks	Kruskal-Wallis test results
Educational environment is a totality of teacher-student relations	Students Teachers	177 219	$\chi 2=8.891$; df=2 ; p=0.012
Educational environment is a space perceptible to learning	Students Teachers	181 222.2	$\chi 2=11.335$; df=2 ; p=0.003
Educational environment is an informational space created by the teacher	Students Teachers	236.01 189.06	$\chi 2=19.355$; df=2 ; p=0.000
Educational environment is a place comprising physical and social aspects of learning	Students Teachers	180.87 196.35	$\chi 2=1.112$; df=2 ; p=0.573
Educational environment is a place where students work together and support each other	Students Teachers	213.59 211.18	$\chi 2=6.537$; df=2 ; p=0.038

The table above shows that there are statistically significant differences between the teachers' and students' attitude toward the concept of an educational environment in some aspects. Teachers place more emphasis on the educational environment as the totality of relationships between teachers and students (average rank – 219), as a space perceptible to learning (average rank – 222), while students rather agree with the statement that an educational environment is an informational space created by the teacher (average rank – 236.01). The smallest differences are attributed to the last statement (an educational space is a place where students work together and support each other). This statement can become a prerequisite for harmonisation of student interrelationships.

Based on previous studies (Blandin, 2008; Brazdeikis, 2009, et al.), an educational environment enables personal self-learning, provides a greater opportunity to develop individual learning, communication, and interpersonal relationships. That is perhaps why academic staff stresses in the survey that an educational environment is a totality of teacher-student relations, a space perceptible to learning where not only positive relationships are built, but an appropriate learning culture is fostered, as well.

1.2. Differences in the attitude toward the concept of a psychological learning environment

Human relationships are one of the most crucial aspects in different life situations. People interact with each other to receive or transmit certain information; their success in it depends on whether results of conversation,

discussion are positive and whether they understand each other. In a higher school, such interaction and the relation between a teacher and a student are very important, as influencing the perception of the information being transmitted, getting the help needed, psychological and spiritual balance.

A psychologically friendly learning environment can be described as collaboration between a teacher and learners, whereby a sense of safety, value, and understanding is assured (Eggen & Kauchak, 2013). It is important for a class to have a sense of tolerance and to live as a small, cohesive community in which everyone has self-esteem and develops their ability to learn and improve. According to the authors, an appropriate psychological environment facilitates constructive problem solving, reveals the personality of a teacher and a learner, motivates to learn, develops life skills and, in general, allows to prevent lots of problems. Many authors (Mercer et al., 2011; Muy & Reynolds, 2011; Eggen & Kauchak, 2013), argue that a teacher plays the most important and decisive role in creating a supportive psychological environment. According to Mercer et al. (2011), such attitudes and features of a teacher as good looks, positivity, motivation and support for learners' opinions and position have a tremendous influence on the creation of a positive psychological climate.

Table 2 **Differences in the teachers' and students' attitude toward the concept of a psychological learning environment**

Variables of psychological learning environment	Group	Average ranks	Kruskal-Wallis test results
Psychological learning environment is a continuous communication and collaboration between a teacher and students	Students Teachers	113.71 222.05	$\chi 2$=86.089; df=2; p=0.000
Psychological learning environment is the assurance of safety, value, and understanding	Students Teachers	215.59 136.95	$\chi 2$=49.748; df=2; p=0.000
Psychological learning environment is a prevalence of tolerance, open-mindedness in learning	Students Teachers	202.02 169.99	$\chi 2$=12.664; df=2; p=0.000
Psychological learning environment is a positive attitude and focus on the strengths and capabilities of a student	Students Teachers	217. 75 121.78	$\chi 2$=65.364; df=2; p=0.000
Psychological learning environment is a stimulus for a learner's reasoning	Students Teachers	138.09 214.63	$\chi 2$=52.041; df=2; p=0.000
Psychological learning environment is an adaptation of a teacher's didactic practice to different learning styles of a student	Students Teachers	119.78 220.34	$\chi 2$=80.341; df=2; p=0.000

D. Mujis et al. (2011) emphasises that psychological climate is quite a wide-ranging concept encompassing the mood or atmosphere that is created in the teacher's classroom, the way the teacher interacts with students, through the rules set out, a tolerance, attention to each person, his/her needs, interests. A warm and supportive learning environment motivates a learner to make a positive contribution to the lesson, stimulates his/her thinking, ingenuity, curiosity, self-esteem, confidence in oneself and the teacher, enhances a sense of responsibility and creates a positive attitude to learning (Teresevičienė et al., 2003).

This study identifies significant differences in teachers' and students' attitude toward the psychological learning environment. The compared variables of teachers' and students' attitude toward the psychological learning environment allow stating that students perceive a positive psychological environment as the assurance of safety, value, and understanding (average rank – 215.59); as a positive attitude and focus on strengths and capabilities of a student (average rank – 217.75); as a prevalence of tolerance, open-mindedness in learning (average rank – 202.02). Meanwhile, a supportive teaching environment means to teachers, first of all, continuous communication and collaboration between two parties, faculty and students, (average rank – 222.05); and an adaptation of a teacher's didactic practice to different learning styles of students (average rank – 220.34).

1.3. Differences in the attitude toward the concept of a material (physical) learning environment

According to a number of authors (Jensen, 2009; Eggen & Kauchak, 2013; Mercer et al., 2011), changes made in the classroom, in particular, adaptation of a physical environment to the needs of students are critical for their adaptation, overcoming of obstacles and well-being. It can be assumed that the creation of a supportive learning environment needs much more than a development of tolerant attitudes or a safe atmosphere – it is also important to focus on the formation of the physical environment.

The conducted analysis of scientific literature allows proposing that a material (physical) environment is a place which has a positive effect on learners (Kucinskas & Poderienė, 2006), influences a learning progress, enhances motivation to participate in the learning process in an active and creative way (Grigaliūnienė, 2002).

After reviewing the results of research, it can be argued that though the concept of a material (physical) learning environment differs from the point of view of teachers and students, the differences, however, are not radical. Teachers, more than students, perceive the material (physical) learning environment as a factor in the development of aesthetic reflection (average rank – 238.90; χ2-21.842; df=2; p-0.000).

Table 3 **Differences in the teachers' and students' attitude toward the concept of a material (physical) learning environment**

Variables of material (physical) learning environment	Group	Average ranks	Kruskal-Wallis test results
Material (physical) learning environment is a spatial structure of the learning and study area (dimensions, purpose, microclimate, mobility, transport, etc.).	Students Teachers	213. 18 181.72	$\chi 2$=6.536; df=2; p=0.034
Material (physical) learning environment is comfortable furniture, hardware, controls and security measures	Students Teachers	205.66 187.17	$\chi 2$=3.545; df=2; p=0.170
Material (physical) learning environment is ergonomic, clean and properly functioning surrounding objects and operational means	Students Teachers	236.58 185.90	$\chi 2$=7.190; df=2; p=0.27
Material (physical) learning environment is a factor in the development of aesthetic reflection	Students Teachers	175.48 238.90	$\chi 2$-21.842; df=2; p-0.000
Material (physical) learning environment is an ergonomic layout of workplaces, provision of necessary learning and study facilities	Students Teachers	196.35 194.03	$\chi 2$=1.112; df=2; p=0.573

1.4. Differences in the attitude toward the concept of an intellectual learning environment

Table 4 **Differences in the teachers' and students' attitude toward the concept of an intellectual learning environment**

Variables of intellectual learning environment	Group	Average ranks	Kruskal-Wallis test results
Intellectual learning environment is informational systems that performs the task of information retrieval	Students Teachers	202.02 142.40	$\chi 2$=12.664; df=2; p=0.000
Intellectual learning environment is counselling systems	Students Teachers	206.01 162.39	$\chi 2$=18.637; df=2; p=0.000
Intellectual learning environment is training-type systems that perform a didactic function in formulating specific tasks for students, recording their knowledge, identifying errors, making recommendations, etc.	Students Teachers	78.23 229.25	$\chi 2$=167.381; df=2; p=0.000
Intellectual learning environment is a computer network- and other ICT-based system for learning with the help of a supervisor	Students Teachers	217.75 130.94	$\chi 2$=65.364; df=2; p=0.000
Intellectual learning environment is the Moodle system.	Students Teachers	220.34 136.76	$\chi 2$=17.037; df=2; p=0.000

It is argued that an intellectual learning environment is recently construed as a virtual learning environment in which the entire educational process or individual parts of it take place (Priedys, 2012). An analysis of the research data suggests that students and teachers perceive the intellectual learning environment in a different way. Teachers treat it rather as training-type systems that perform a didactic function in formulating specific tasks for students, recording their knowledge, identifying errors, making recommendations, etc. (average rank – 229.25). Meanwhile, students understand the intellectual environment as the Moodle system (average rank – 220.76), as a computer network (average rank – 217.75), or as a counselling system (average rank – 206.01).

2. The attitude of teachers and students toward the accountability for creating and maintaining a supportive learning environment

The second question of research: What is the attitude of teachers and students toward the accountability for creating and maintaining a supportive learning environment and how does it differ?

To answer this question, the completed questionnaires of teachers and students were analysed using a nominal scale. By applying the Mann-Whitney U test, statistically significant differences in the estimates for creating and maintaining a supportive learning environment on the nominal scale have been identified (Mann-Whitney U=303.000, p=0.000): the average rank in the group of teachers tuned to be higher than in the group of students. The table below provides the differences between student and teacher estimates:

Table 5 **Differences in the estimates for teachers' and students' attitude toward the accountability for creating and maintaining a supportive learning environment**

Accountability for creating and maintaining a supportive learning environment	Students	Teachers	Chi-squared test results
A teacher is accountable	83.5%	61.3%	$\chi 2=6.278$; df=1; p=0.012
Students are accountable	24.1%	51.6%	$\chi 2=7.796$; df=1; p=0.005
Teachers and students are accountable	32.9%	83.9%	$\chi 2=23.195$; df=1; p=0.000
University administration is accountable	24.1%	83.9%	$\chi 2=32$; df=1; p=0.
All actors are accountable	25.3%	96.8%	$\chi 2=45.852$; df=1; p=0.000

As you can see in the table above, the study shows quite significant differences in estimates. As much as 83.5 percent of students believe that a teacher is responsible for creating and maintaining supportive learning environments. Though the teachers do not mind to assume accountability for the creation and maintenance of supportive learning environments (61.3 % of teachers think this way), they, however, believe that the accountability lies not

only with them but with students (51.6 %) and administration of the university (83.9 %), as well. In other words, teachers believe that accountability for creating and maintaining supportive learning environments is shared among all the listed actors (96.8 %). The estimates presented by teachers, thus, do not match the students' estimates.

3. The attitude of teachers and students toward the elements of developing a supportive learning environment

The third question of research: What is the attitude of teachers and students toward the elements of developing a supportive learning environment and how does it differ? To answer this question, the completed questionnaires of teachers and students were analysed using a nominal scale. By applying the Mann-Whitney U test, statistically significant differences in the estimates for the elements of developing a supportive learning environment on the nominal scale have been identified (Mann-Whitney U=596, p=0.000): the average rank in the group of teachers was higher than in the group of students. The table below provides the differences between student and teacher estimates:

Table 6 **Differences in the estimates for teachers' and students' attitude toward the elements of developing a supportive learning environment**

Elements of developing a supportive learning environment	Students	Teachers	Chi-squared test results
Providing students with all necessary resources	20.3%	48.4%	$\chi2=8.707$; df=1; p=0.000
Support for the relevant learning excellence	65.8%	74.2%	$\chi2=3.091$; df=1; p=0.396
Involvement of students in the organising and planning of study and learning process	44.3%	58.1%	$\chi2=1.689$; df=1; p=0.194
Providing feedback at all times of studies	44.3%	83.9%	$\chi2=14.110$; df=1; p=0.00
Providing freedom in activities and space for a learner, recognition of individuality	36.7%	61.3%	$\chi2=5.470$; df=1; p=0.019
Application of activating and interactive didactic methods, andragogical dialogue and andragogical approach, heterogeneity management	89.9%	96.8%	$\chi2=1.411$; df=1 ; p=0.0235
Provision of sufficient sources of information, sharing of knowledge and experience	60.8%	83.9	$\chi2=5.401$; df=1; p=0.020
Providing timely advice, support / assistance to students in solving various problems	67.1%	90.3%	$\chi2=6.191$; df=1; p=0.013
A content of the study subject is communicated in such a way that a learner is able to understand, master it based on his/her individual learning approach and style	8.9%	54.8%	$\chi2=27.591$; df=1; p=0.000

As the table above shows, one of the elements of developing a supportive learning environment has the smallest difference in estimates (*Application of activating and interactive didactic methods*: student estimates – 89.9 %, teachers – 96.8 %). The element of creating a supportive learning environment, such as *Providing students with all necessary resources* (student estimates – 20.3 %, teachers – 48.4 %), is not a priority for students or teachers. Quite surprisingly, that less than half of the students participating in the survey were in favour of *Providing freedom in activities and space for a learner* – 36.7 %. Whereas 61.3 % of teachers would like to apply this element in creating a supportive learning environment. This fact is presumably associated with inadequate independent behaviour of students. A small proportion of students and just over half of teachers opted for the element *A content of the study subject is communicated in such a way that a learner is able to understand, to master it based on his/her individual learning approach and style* (students – 8.9 %, teachers – 54.8 %). It is assumed that the above estimates relate to the lack of knowledge in andragogy.

The research findings may relate to the studies conducted by B. Jatkauskienė (2013; 2014), G. Tolutienė (2013), other studies, with the basic concepts and ideas essentially coinciding with the results of the current research. The aforementioned authors emphasise the following elements of the development of the learning environment: mediation, respect for differences (Eggen & Kauchak, 2013); problem solving, reflection, collaboration (Tolutiene, 2013); sense of safety (Muiji & Reynalds 2011), application of andragogy approach, heterogeneity management, support/assistance in solving learning problems (Jatkauskienė, 2013; Jatkauskienė et al., 2014).

4. The attitude of teachers and students toward mutual relations and harmonisation thereof in the creation of a supportive learning environment

The fourth question of research: What is the attitude of teachers and students toward mutual relations and harmonisation thereof in the creation of a supportive learning environment, how does it differ? To answer this question, the completed questionnaires of teachers and students were analysed using a nominal scale. By applying the Mann-Whitney U test, statistically significant differences in the estimates have been identified (Mann-Whitney U=921, p=0.027): the average rank in the group of teachers is higher than in the group of students. The table below provides the differences between student and teacher estimates:

Table 7 **Differences in the estimates for teachers' and students' attitude toward mutual relations and harmonisation thereof in the creation of a supportive learning environment**

Factors of creation of a favourable learning environment for the harmonisation of mutual relations	Students	Teachers	Chi-squared test results
An educational environment supportive for studies provides capacities to each student and has a positive effect on the outcomes of studies, mutual relations	65.8%	74.2%	$\chi 2=0.719$; df=1; p=0.396
A psychological environment supportive for studies stimulates student activity, critical thinking, independence, communication and collaboration	63.3%	80.6%	$\chi 2=3.091$; df=1; p=0.079
A material (physical) environment supportive for studies gives not only aesthetic satisfaction or capability for aesthetic reflection, but enhances the desire to be in a group and with a group, too	45.6%	61.3%	$\chi 2=2.201$; df=1; p=0.138
An intellectual environment supportive for studies encourages student communication, debates, team accomplishment of practical tasks, implementation of joint projects, sharing of experience, responsibility for joint learning activities and mutual relations, provides free access to information and knowledge necessary for studies and learning.	78.5%	83.9%	$\chi 2=0.404$; df=1; p=0.525

As can be seen from the data presented in the table above, most students and teachers (78.5 % and 83.9 %) gave highest estimates for the intellectual environment supportive for studies which encourages student communication, debates, team accomplishment of practical tasks, implementation of joint projects, sharing of experience, responsibility for joint learning activities and mutual relations, provides free access to information and knowledge necessary for studies and learning. Hence, it can be assumed that the intellectual learning environment becomes the basic educational factor in the harmonisation of the group's interrelationships and achievement of better learning and learning outcomes. This assumption relates to the conceptual ideas of lifelong learning according to S. Neifach (2014: p. 20). The author emphasises the impact of a supportive intellectual learning environment on the harmonisation of interpersonal relations, as it becomes an inclusive field of innovation and experiment, an area for experiencing a new informational and communication culture. Within this area, social skills (teamwork skills, empathy, general design

of activities, etc.) and learning-to-learn skills (self-learning, meta-cognitive skills, learning from mistakes and experiences, etc.) are being developed. The virtual intellectual learning environment is characterised by emerging new ways of learning that are specially designed for a learner of today; they are very intense, constructive, motivating and promoting excellence (Neifach, 2014: p. 21). The virtual environment is a space for learning by combining time and context, a virtual merging with other people, sources of information, which sometimes grows into a real interaction on the academic and personal levels.

The research findings, in conjunction with theoretical assumptions, allow suggesting that the relationship between the harmonisation of interrelations within a group of learners and a supportive learning environment must be referred to as a student-centred learning strategy (Jonasen et al., 2012). Besides, authors of foreign studies (Strange et al., 2015; Tuit et al., 2016) outline the main means for harmonising a group's interrelationships though the creation of a supportive learning environment: partnership, mediation, assistance/support for the learner; a dynamic and open context of the learning environment; flexible learning opportunities.

A material (physical) environment supportive for studies, which gives not only aesthetic satisfaction or capability for aesthetic reflection, but enhances the desire to be in a group and with a group, too, received the lowest score (students - 45.6 %, teachers - 61.3 %). It can be presumed that the student and the teacher of today increasingly associate their activities and communication with a virtual world, a virtual environment of learning and studies.

Conclusions

1. Following the analysis of scientific literature, it has been found that the concept of a learning environment is multidimensional, yet, the use of it in scientific discourse is sufficiently substantiated. Implementation of the concept of lifelong learning encourages both individual and group learning. In this connection, there emerge interpersonal relations within the group of learners and aspects of harmonisation thereof while creating a supportive learning environment.
2. Results of the empirical research allow arguing that the main hypothesis of the research – a supportive learning environment, the creation of it can be one of the main educational factors for the harmonisation of mutual relations in the group of learners and for the outcomes of studies and learning – is hereby validated.
3. The empirical study shows that teachers and students have quite a clear understanding of the concept of learning environments, however, both groups under study (teachers and students) construe various learning

environments, elements of their creation, accountability of actors for creating and maintaining the environments in a different way.

4. It has been found that significantly more than half of students think that a teacher is accountable for creating and maintaining a supportive learning environment. Though the teachers do not mind to assume accountability, they, however, believe that the accountability lies not only with them but with students (51.6 %) and administration of the university (83.9 %), as well.
5. When trying to find answers to the third question of research (what is the attitude of teachers and students toward the elements of developing a supportive learning environment and how does it differ), the attitude of teachers and students should be stressed to differ considerably. Quite surprisingly, that less than half of the students participating in the survey choose *providing freedom in activities and space for a learner*. Whereas, 61.3 % of teachers are willing to apply this element in creating a supportive learning environment. This fact is presumably associated with inadequate independent behaviour of students. However, it is worth noting that most students and teachers speak for active and interactive didactic approaches to create a supportive learning environment.
6. The attitudes of teachers and students with regard to mutual relations and harmonisation thereof in creating a supportive learning environment differ in terms of estimates as well. An average rank in the group of teachers is higher than in the group of students. However, it is worth noting that both groups highly value an intellectual virtual environment of learning. Hence, it can be assumed that the intellectual virtual learning environment becomes the major educational factor for better achievements of learning and studies and even better interpersonal relationships. It should be also noted that other learning environments (educational, psychological, material (physical)) have been found to have an effect not only on student interrelationships, but on learning outcomes, student activity, critical thinking, independence, communication, collaboration, development of aesthetic reflection skills and etc., too. Thus, in spite of some differences in attitudes of teachers and students, both groups of respondents acknowledge the fact that a learning environment has an educational effect on interrelationships of students, outcomes of learning and studies.
7. It has to be assumed that observations made in this research can be used in the teaching practice so as to better understand contemporary students, relationships between teachers and students, as well as the formation of students' positive attitudes toward learning activities and communication.
8. Future directions for the research – further studies shall be aimed to find the means by which the teachers are able to build supportive learning

environments in pursuing harmonisation of interrelations within a group of learners. Answers to the following questions will be sought: can means such as partnership, mediation, support / assistance, mentoring, leadership, socio-cognitive conflict solving, educational supervision, counselling, etc. be applied in creating supportive learning environments and harmonising interrelations within a group of learners. It is understood that further studies will attempt to identify which of the above means are particularly effective and function as an educational factor in learning, in pursuance of interrelationship coherence and high learning outcomes.

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THE INTEGRATION OF THIRD-COUNTRY NATIONALS IN THE LATVIAN EDUCATION ENVIRONMENT: THE CURRENT SITUATION AND KEY ISSUES

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Abstract. *Due to the European migrant crisis, the issue concerning the integration of refugees, third-country nationals, into Latvia's society has become increasingly topical in the last years. Since a lot of refugees are under 18, schools also must be ready to accept learners of other nationalities and cultures and help them integrate into the community of the host country. According to studies conducted in Latvia, the system of education needs to change the attitude towards the integration of immigrants in the school environment. Therefore, the incorporation of inter-cultural experience in the curricula of teacher-training institutions is a significant factor that could enable pre-service teachers to prepare for their professional life and the implementation of the approach of inclusive education at school. The aim of the article is to analyse the current situation and the main issues concerning the integration of the children of third-country nationals in the Latvian school environment and the multi-cultural Latvian society. The study is based on the analysis of scientific literature, documents, academic research data as well as student essays. Having analysed the opinions of 166 respondents, the authors of the article concluded that it is important to promote the development of a positive attitude to the inclusion of third-country nationals in the Latvian education environment in the process of teacher training, focussing on cross-cultural communication and the principles of inclusive education.*
Keywords: *attitudes, language, third-country nationals.*

Introduction

Immigration tendencies are becoming more pronounced both in the map of Europe and in the world, turning people's movement across borders into a significant issue for national and international policy planners. The EU immigration policy depends on global economic and political factors as well as

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the national interests of the member states and the conditions resulting from the free movement of labour.

After accession to the EU, the flow of immigration from third countries has also increased in Latvia. In the period of 2009 - 2015, the number of foreign nationals increased from 49 871 people in 2009 to 84 037 in 2015. At the beginning of 2015, 51 029 foreign nationals with permanent residence permits and 33 244 people with temporary residence permits were registered in Latvia, with 23 671 third country nationals among them (Kļave et al., 2015, 2)

Among other branches of national economy, education is also subject to the strong impact of globalization and faces various challenges. The implementation of inter-cultural education and the development of the attitudes of pre-service teachers, preparing them for the work with the children of third-country nationals, have become topical issues. According to the data of the Ministry of Education and Science, 731 foreign citizens were enrolled in Latvian schools in 2013/2014, with 380 third-country nationals among them (IZM, 2013/2014)

The aim of the article is to analyse the current situation and the main issues concerning the integration of third–country nationals in the Latvian school environment and in the multi-cultural Latvian society.

Materials and Methods

The study is based on the analysis of scientific literature and policy documents as well as the essays of young teachers, who are also part-time students at the University of Latvia.

The inclusion of third-country nationals in the multicultural environment of a host state has become especially topical in the past decade (Trasberg & Kond, 2017; Bartkevičiene & Raudelitinaite, 2012; Szerlag, 2017; Koiv et al., 2013; Mensah, 2010; Veebel, 2015, etc.) In the studies devoted to this topic, it is emphasized that Latvia lacks experience in the integration of third-country nationals in education, and an effective integration policy should be developed specifically targeted at this group (Lulle et al., 2008; Koiv et al., 2013).

Research data also highlight various problems related to the integration of foreign nationals in the field of education:

- the language barrier, the lack of suitable teaching materials, as well as the lack of skills among teachers working with these target groups (Djačkova et al., 2011: 10; Pičukāne, 2013);
- the need to create a supportive environment, reducing the intolerance of teachers and the general society to foreigners and raising the awareness of the society about the opportunities and the potential that third-country nationals could bring to the future development of the

state (Indāns, 2012; Pičukāne, 2013; Bartkevičiene & Raudelitinaite, 2012);

- the lack of succession and continuity in the implementation of integration measures; the need for better cooperation between the society, the local authorities and the private sector (Kļave et al., 2015; Veebel, 2015);
- the need for inter-cultural education, which should not concern only schools, but the whole society (Margeviča, 2008: 14; Trasberg & Kond, 2017, Szerlag, 2017);
- the creation of a favourable learning environment where students could communicate, collaborate and feel safe (Pičukāne, 2013: 9; Rauhansalo & Kvieska, 2017).

According to several national policy planning documents adopted in Latvia, it is intended to implement various measures aimed at improving the education quality of immigrant children like teaching basic Latvian language skills to newly-arrived immigrants, motivating Latvian schools to enrol the children of third-country nationals and supporting the elaboration of additional education programmes for teaching the Latvian language to those children whose native language is not Latvian (Guidelines on National Identity, civil society and integration policy (2012-2018), 2011).

Support mechanisms targeted at the children of newly arrived immigrants and young immigrants are also envisaged in the action plan adopted by the Ministry of Education and Science, according to which financial support should be provided for the acquisition of primary education and general secondary education (Action plan for promoting society consolidation in the field of education for the period of 2012-2014, 2012).

Thus, the incorporation of inter-cultural experience in education programmes and the acquisition of the language of the host country are two key measures to solve the issues concerning the education of third-country nationals. It is also very important to apply the models of best practice acquired in bilingual education to the integration of third-country nationals in Latvian schools. At present, the aim of bilingual education is to integrate these learners in a new social space while preserving their awareness of their own culture (Pičukāne, 2013).

The key theoretical principles for most theories of bilingual education refer to the acquisition of a second language. Colin Baker (Baker, 2002) draws attention to special programmes elaborated to understand the role of a language deeper. Their aims are as follows (Baker, 2002: 297-298):

- to develop students' awareness of their level of proficiency in their first language;
- to develop language learning skills, advance communication skills in the newly acquired languages, promote students' understanding of the

nature and functions of the language, raise their awareness of the process of language acquisition and advance communication skills in the first language and other languages;

- to develop students' awareness of the linguistic diversity in the world, as well as their awareness of language variations; to improve relationships between different ethnic groups by familiarizing them with the languages of these groups; to help students overcome the alienation between the family language and the school language; to develop their understanding of bilingualism and multilingualism.

Based on the ideas offered by Baker, it is possible to develop language acquisition programmes for the children of third-country nationals and facilitate their inclusion in the Latvian education environment.

According to Bourdieu (Bourdieu, 1991: 107-117), the ability to use some language successfully results in "enrichment" since it enables an individual to collaborate with others in various social contexts. The notion "collaboration" is closely connected with the notion "tolerance", which implies mutual interaction – the host nation should accept third-country nationals and show tolerance for cultural differences, while third-country nationals should accept the key values of the host country.

Several projects have been implemented in Latvia supported by the European Fund for the Integration of Third-Country Nationals. Some examples are the project "Support for School Communities in Promoting Tolerance and Inter-cultural Dialogue in Multicultural Collectives" implemented by the Education Development Centre (2017) and aimed at the development of a consolidated society by means of the activities of inter-cultural education, the project "Diverse Solutions for Public Education and Integration" implemented by the NGO "Shelter 'Safe House'" aimed at enhancing the competencies and skills of the people working with third-country nationals in the public administration, local governments and NGOs, as well as a project organized by Riga City Council in the framework of which teaching materials intended for working with newly arrived immigrants and the children of re-immigrants were developed (Materiāls darbam ar jauniebraucēju un reemigrantu bērniem izglītības iestādēs, 2017).

The main emphasis is put on language acquisition in these projects. For instance, in the project "A Teacher in the Intercultural Space", a set of modern teaching materials was developed by the Latvian Language Agency in 2011. It is entitled "Let's Open the Gate" and is intended for teaching third-country nationals, asylum-seekers and refugees. This set of materials includes the curriculum as well as different teaching aids appropriate for children aged 13 – 18 for the acquisition of the basic Latvian language (level A1), as well as the basic knowledge in Latvian geography, history and culture. It also includes a disc with e-materials. When developing these teaching materials, the criteria promoting the

development of tolerance have been considered, including equal opportunities, social equality, individual rights, positive attitude, support for diversity important for an individual, the sense of belonging, the awareness of diversity, equality and respect (Auziņa et al., 2011).

The project "The Support for Third-Country Nationals before Immigration and during the Adaptation Period" (2012-2015) also provides the newly arrived immigrants with the opportunity to acquire the Latvian language and improve their education by developing learning materials which are freely available online, organizing language courses and seminars, as well as competitions and camps for children (www.saziņastilts.lv; www.valoda.lv).

Results and Discussion

To clarify the opinions of young teachers on the issues concerning the integration of third-country nationals in the Latvian educational environment and the need for the intercultural dialogue, the analysis of the essays written by second-year part-time students (166 respondents) was carried out. The study was conducted in the period of April – March 2017.

Summarising the research data, it appears that most of the respondents (72 %) have encountered a language barrier in their pedagogical work with third-country nationals. It is the main obstacle hindering immigrants' access to education, and the examples mentioned in the essays clearly demonstrate it. "Immigrants who want to study encounter the language barrier. Most of them have studied English a bit, but the Latvian language is totally unknown to them, and it takes a long time to learn a new language" (Elīna); "Our official language is a foreign language for them, so they have problems both with communication and the acquisition of the study material" (Jana); "It is difficult to include them in the first form together with those children who can read, write and speak Latvian. It is additional work for teachers" (Laima).

Even though serious improvements have been made in the inclusion of third-country nationals in the Latvian school system, including the increased availability of Latvian language courses and the accessibility of general education by granting everyone the right to compulsory pre-school education and primary education (Kļave et al., 2015: 100), the results of our study show that it is necessary to further improve language learning opportunities for both parents and children, as well as for people with an insufficient level of language proficiency by means of both formal and non-formal education (learning materials freely available in the electronic environment, summer camps aimed at language learning and integration, etc.).

A significant majority, 61 % of the respondents, mention cultural differences – traditions, clothes, food and religion – as possible barriers for the

integration of immigrants in the Latvian education environment. "It is difficult for immigrants to accept another culture, different laws and start a new life in another country and culture, accept this society and establish mutual relationships" (Baiba); "Immigrants' way of life is different; their food is different, too. Due to food differences, there could be problems to have lunch at the school canteen; the habits of clothing are different. When Muslims arrive, and they are dressed in the clothes where only their eyes are visible, Latvians do not want to accept that in their schools" (Vēsma). The students emphasize in their essays that it is difficult for both parties to accept each other's culture and traditions. Religious beliefs are mentioned in the 13 % of the students' replies. "Most of us perceive refugees as the representatives of a religion alien for us – as Muslims" (Ilze).

At present, the Latvian immigration policy needs to tackle issues caused by the shortage of labour, and the general aim of the country is to reach the average EU standard of living as soon as possible. Nevertheless, the opinions expressed by the respondents indicate that their understanding of the potential of immigration is not always adequate. According to Indāns, "there is a contradiction in the Latvian refugee policy as the inhabitants are concerned about their national identity and cultural values; they feel threatened by international terrorism, which they associate with immigrant communities" (Indāns, 2012: 39).

The result of the study demonstrates that more attention should be paid to deepening the understanding of culture in its entirety both in school curricula and in the institutions of higher education and explaining cultural differences to enhance students' tolerance for other cultures, develop empathy and raise students' awareness of their own culture within other European cultures and the global culture of the humanity. Multiculturalism is a category characteristic of this time. It broadens the understanding of differences between individual cultures. Therefore, schools need to provide inter-cultural education to enable the young generation to acquire citizenship skills (Szerlag, 2017).

Thirteen percent of the students surveyed indicate that the stereotypes dominant in the society should be considered when speaking about the inclusion of refugees in the Latvian education environment. "Unfortunately, there is a view in Latvia that they (refugees) are not welcome, and they are referred to as terrorists and suicide-bombers" (Elza); "Latvians are afraid to accept refugees in our society because then the immigrants will be close to our children and might endanger them" (Laima). The stereotypes dominating in social media are often negative. Youngsters try to exclude immigrants because they have heard of terrorism and bloodshed" (Ilze).

The examples mentioned by the respondents could have stemmed from the exaggerations and prejudices against third country nationals created by the media. Although individual's identity remains unchanged during their lifetime, it is modified in the socialization environment, where family, school and media are

the main agents (Berger & Luckmann, 1991). Understanding the role of the media and creating a positive attitude to immigrants are the issues that concern not only teacher education (Pičukāne, 2013: 47), but also the education of society in general.

The issue of tolerance is highlighted by 21 % of the students: "The issue of refugees is a very sensitive matter in Latvia. Integration is a two-way street. Refugees should be willing to be integrated, and the host country should be willing to integrate them. Latvia is a multi-cultural country, but we are still not tolerant to what seems to be foreign and different" (Anete); "The key problem is the lack of empathy for refugees. The society is not ready to show their sympathy" (Diāna); "Perhaps children have had more opportunities to be in "different" kinds of environment in Riga, but in the countryside, where just "neighbouring" children study, there are no strangers, and it is difficult to accept differences" (Lauma); "Nowadays schools should pay more attention to developing children's ability to accept differences" (Liene).

Students' responses show that the young teachers are aware that a multicultural society whose goal is to achieve the recognition of diversity is based on mutual acceptance and the informed perception of a different identity (Margeviča, 2008: 36); consequently, the aim of inter-cultural education is to promote empathy as the ability to understand the situation of another nation (group) and look at one's own group from the viewpoint of this other group, as well as the ability to fit in other cultures.

Eleven percent of the respondents point out financial issues: "I think it is hard for anyone without money; in Latvia, benefits are too small to make ends meet; after all, immigrants do not have a home, and it is difficult to find a good job" (Baiba); "Schools lack funds to educate foreign children. The state is not able to provide the education of our own children adequately, not to mention the families of refugees" (Sandra).

Fifteen percent of the students have highlighted the shortcomings of the system of education that hinder the integration of immigrants: "Latvian schools are quite conservative, and they have difficulties accepting different children" (Kristīne). Some respondents suggest that there should be special schools for immigrants: "I think Latvia needs to set up special schools for refugees to facilitate their integration in the society (Evija);

Seventeen percent of the students indicate that special study programmes and teaching materials are needed: "Children have been taught according to different curricula or have not been taught at all. Therefore, it is difficult to enrol them in the classes corresponding to their age, since their level of knowledge does not correspond to that of Latvian schools. It is also not possible to provide individual education to all of them" (Anete); "Personally, I would introduce a subject

devoted to foreign culture at school where children would get acquainted with the traditions and the cultural heritage of different nations" (Māra).

Teachers' lack of experience working with the children of third-country nationals is pointed out by 28 % of the respondents: "Most teachers are not ready to work with the learners of different ethnicity, religion or even appearance. To work successfully, teachers must know the history, culture and religion of the respective country (at least a little bit)" (Diāna); "There is one Polish boy in the first form. In the second form, there are two Spanish girls. Teachers do not know the native languages of these children" (Juta); "Most Latvian teachers are not trained to work with refugee children. Teachers lack necessary inter-cultural and language skills to effectively include these children in the system of education" (Anete). Students' opinions show that it is necessary to provide courses in intercultural education in higher educational institutions specializing in teacher training.

Eleven percent of the students have also indicated that the Latvian system of education should consider the low level of education immigrant children could have attained. "The level of education is very low among the immigrants, and they cannot hope to fit into the class corresponding to their age. For example, a 16-year-old refugee boy cannot study together with 16-year old Latvian students" (Kārlis).

Finally, 8 % of the respondents point out that the process of integration is also hindered by parents' negative attitude to immigrants. "The problem is the attitude of each particular family which antagonizes children by saying that immigrants are bad, and they have nothing to do here" (Katrīna). "Parents also have to be positive and open. Children feel and hear what they talk about at home" (Gunita).

Based on the data of the study it can be concluded that the young teachers, part-time students, understand the inclusion of third-country nationals in the school environment as a great challenge not only for immigrant families and children, but also for educators, who must meet their diverse needs and show respect to each child. The respondents are also aware of the fact that Latvia has had little experience with the inclusion of these target groups in education so far, implementing the principles of inter-cultural education, and they are ready to work in the inter-cultural space.

Conclusions

Latvia has had little experience in integrating third-country nationals in the education environment so far. However, according to statistics, the number of the representatives of this target group is growing in Latvia. The language barrier, the lack of special adapted education programmes and teaching materials, as well as

the limited opportunities to acquire the basic Latvian language are the main obstacles that hinder the successful integration of immigrant children and youth in the Latvian system of education.

In education, it is important to evaluate the potential of bilingual education, intercultural education and inclusive education, while particular emphasis has to be placed on the language acquisition and teacher training, focusing on the development of their intercultural competency, as well as the development of appropriate teaching materials and methodological aids. Thus, a complex of various measures should be implemented to facilitate the possibility of third-country nationals to enrich the Latvian cultural, economic and social capital.

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CHANGING CAREER DIRECTION FROM HIGHER EDUCATION TO VOCATIONAL EDUCATION AND TRAINING

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Abstract. *The article discusses the problem of overeducation which is described as a situation when individuals gain education higher than required in the labour market and, thus, fall into the so-called opportunity trap (Brown et al., 2011). Individuals' investment into their education does not meet the expectations: they must expand their career opportunities by changing a career direction towards vocational training. The article aims to reveal the reasons that lead to such a situation. The case analysis revealed three periods which characterize and explain transformations in individuals' considerations about the value of education and qualification. The 1st period describes a transition of graduates from secondary school to higher education institution. It reveals factors determining the choice of higher education institution. The 2nd period describes experiences of students in higher education system until changing their career for vocational training. The 3rd period reveals main reasons and factors of students' choices.*
Keywords: *overeducation, career direction, retraining, qualification extension, labour market.*

Introduction

The recent research (Meroni, Vera-Toscano, & Lombardi, 2014) shows that overeducation is a multi-sided phenomenon. In some countries such as Italy, Spain, Czech Republic and Japan, overeducation is always a trap, while it also might be a stepping-stone towards a match job in The Netherlands, Belgium, France, Poland, United Kingdom, Slovenia, Turkey, Portugal and Lithuania. Moreover, in Austria, Germany, Finland, Hungary, Norway and Estonia, overeducation changes its characteristics depending on the time period. It can be a trap or a stepping stone according to the months in which the job is found. Following Europe 2020 strategy Lithuania aims that at least 40 % of the younger generation acquires higher education. However, increasing investment in the human capital in order to gain as higher qualification as possible, but without getting the appropriate return, leads to the problem of overeducation. This leads to inconsistency in the labour force supply and demand in the labour market and reflects inefficiencies of both the systems. Higher education graduates fall into

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the opportunity trap (Brown et al., 2011) when there are no opportunities to find a relevant job after acquiring higher education, and this encourages them to change career direction by choosing a profession of the lower qualification level. This trend is also reflected in the Lithuanian Department of Statistics data on the annually increasing number of higher education graduates entering vocational schools (2015; 2016). Since 2012, the number of higher education graduates, continuing their education in vocational education and training (VET), has significantly increased: only 21 in 2012, 84 in 2013, 380 in 2014 and over 1000 in 2016. When analysing this problem, it is important to identify over-education factors as well as the reasons which makes young graduates to choose vocational training as an alternative path. The article focuses on the following objectives:

1) Describe the trends of the labour force supply and demand in the Lithuanian labour market.
2) Identify factors, making highly qualified individuals to fall into the opportunity trap.
3) Disclose reasons, encouraging higher education graduates to gain a qualification in vocational schools.

The article analyses the problem of over-education and changing career direction, using the method of scientific literature and document analysis and case study. Data was collected using semi-structured interview and focus group discussion methods.

Career planning peculiarities combining higher education and vocational training opportunities

The main objective of education today is very much linked not only with the education of an individual but with his/her qualification as a key to the integration in the labour market and thus achieve a progress of the state. The aim of the Lithuanian strategic documents, which are based on the European Union‘s growth strategy, is that at least 48.7 percent of persons aged 30-34 had higher education. However, the opinion on the need of highly qualified individuals does not meet the actual demand of labour force in the labour market. Lithuania is still dominated by the transitional model of high skills formation when the supply of labour force with higher education does not meet the demand for jobs. Therefore, according to the forecast of the Lithuanian Labour Exchange (2014; 2015; 2016; 2017), Lithuania did not only achieved the goals set by the European Union for the preparation of highly qualified individuals, but also has a slight 1.63-percent surplus in the labour market. This surplus is distorted by the excess choice of studies in the field of social sciences. Nonetheless, there is also a considerable number of unqualified people in the labour market: the supply of such people

amounts to 13.43 percent, while the demand is for qualified employees, the shortage of whom amounts to 15.36 percent. Taking into account the interaction between the education system and the labour market in Lithuania, it is noted that education policy forms public opinion that the best career opportunities are available after acquiring higher education. However, taking into account the actual situation in the labour market, it is noted that all businesses are still developing and the need for highly qualified individuals is limited (Stasiūnaitienė et al., 2013; Tutlys, 2013).

When planning a career, the choice of higher education studies is linked to better career opportunities. The analysis of this topic is found in studies performed by Barone and Ortiz (2010), Geel and Backes-Gellner (2011), Lehmann (2008), Newhouse and Suryadarma (2015), Peiro, Agut and Grau (2010), Powell, Bernhard and Graf (2012). Such studies showed the problematic sides of the integration of people with higher education into the labour market. The problem exists that career planning at school age is mainly oriented to higher education without proper consideration of other alternative paths. As a consequence highly qualified individuals fall into the opportunity trap (Brown et al., 2011). The opportunity trap refers to the situation where individual‘s expectations when investing in human capital do not pay off because of the oversupply of highly qualified labour force in the labour market. This makes higher education graduates changing their career direction.

This situation is caused by more than one factor (Stasiūnaitienė et al., 2013):

- Rapid economic restructuring processes and growth in the unemployment rate led to the public opinion that higher education qualification provides a guarantee that one will not be unemployed;
- Stigmatisation of vocational training is specific to Lithuania and other post-Soviet countries. This negative attitude remained after the Soviet regime as then it was believed that vocational training closes all the opportunities for professional and personal development.
- Tutlys (2013) does not only support, but also complements the list of factors distinguished by Stasiūnaitienė et al. (2013):
- Increasing digital Taylorism (Tutlys, 2013), which is specific to knowledge-based economies when business development strategy and the development of modern technologies are based on operational standartisation, so there is no high demand for highly qualified individuals.
- Pursuit of social mobility when middle-class population invests in their children‘s higher education in order to ensure a higher social status.

Others:

- Studies, providing a university degree, are becoming increasingly attractive because they determine a further professional career and future salary. The acquisition of higher education is becoming a value for young people (Lamanauskas, Augienė, & Makarskaitė-Petkevičienė, 2012).
- However, there are students, for whom the most important result of higher education institutions is a diploma, justifying the acquisition of qualification rather than the acquisition of knowledge and skills (VPVI, 2010).
- New employment requirements posed by employers: the importance of key competences (Jurkšaitienė & Misiūnas, 2013).

The revealed typical factors indicate the prevailing overeducation problem, but they are very diverse. Therefore, they can be divided into micro factors and macro factors. Micro factors include the individual‘s internal views, attitudes, expectations, family situation, etc. Macro factors such as the opinion formed by education policy on the need for highly qualified individuals and the demand from employers which act as a stimulus for creating personal attitudes, i.e. micro factors. Other macro factors such as the emergence of digital taylorism and the limited number of jobs for highly qualified individuals are caused by rapidly developing economy. Micro factors arise for the following reasons: the prevailing attitudes in the society (stigmatisation of vocational training, a guarantee that one will not be unemployed), expectations for a better life (by getting a diploma, investment in human capital for a career and a higher salary, social mobility).

After reviewing the identified factors, it can be stated that the lack of cooperation between the education policy and the labour market in Lithuania contributed to the overeducation of some part of the labour force. Competition resulted in the oversupply of people with higher education in the labour market. In turn, this led to such consequences as unemployment, brain drain, need for retraining or expansion of qualification, which requires new investment both from an individual and the stat’s side.

When highly qualified specialists whose investment in human capital did not pay off because the returns received did not meet their expectations, it is noted that in such a situation, individuals start looking at their career more pragmatically and try a variety of career paths. This is revealed by career planning studies (Harris, Rainey, & Sumner, 2006; Wai-Ling Packard et al., 2012), which drew attention to the movement of career paths of highly qualified individuals in several directions when the movement takes place between different fields of science (social, technological, etc.) and types of educational institutions (vocational school, college, university

According to the learning path study conducted by Harris et al. (2006), highly qualified individuals often choose vocational schools for the following reasons:

- Aim to broaden their career prospects at work, i.e. desire to work in another position in the same organisation.
- Early career planning, preparing another plan if the current career direction can no longer develop.
- Personal ambitions, the desire to invest in themselves and become a professional in a chosen field. However, the change in career direction takes place not only because of internal ambitions, but also because of the compulsory professional development in the workplace.
- Complete change in career direction by choosing studies that are opposite to the individual‘s current education, for instance, from philosophy to electronics. Such career changes have been done without knowing yourself and seeking help from a career consultant.

The employers surveys reveal that young graduates often lack not only practical skills but also specific, work related, and social skills (Jurkšaitienė & Misiūnas, 2013; Poviliūnas, Žiliukaitė, & Beresnevičiūtė, 2012). Stasiūnaitienė et al. (2013) state that because of the limited number of jobs for highly qualified individuals, young graduates fail to get a job according to their qualification and they tend to choose lower job positions and vocational training to acquire the missing skills.

Other authors (Barone & Ortiz, 2010; Blazqueza & Budr 2012; Brown et al., 2011; Peiro et al., 2010) note a negative impact of a structural imbalances of the labour market on the individual. Overeducation is linked to low productivity and poor job satisfaction. The identified reasons for the choice of higher education graduates to enter a vocational school can be divided into internal and external ones. Internal reasons are based on the individual‘s internal ambitions to pursue a professional career. Meanwhile, external reasons do not depend on personal needs, and the individual reacts to the current life situation or incentives from higher bodies. It is noted in the analysis of the career change phenomenon when higher education graduates decide to choose vocational training, both internal and external reasons are active while making a decision to change one’s career. The enlargement of career opportunities by choosing vocational training is based on the extension of existing qualification or retraining.

Methodology

A case study as a method is used to understand complex social phenomena. When analysing the phenomenon of the change in the career direction of higher education graduates, the case study is defined by the choice of vocational training

as a complementary alternative. The chosen case study strategy allows seeing the causal relationship between significant life events (choice to study in the higher education institution, study period at a higher education institution and studying at a vocational school). Triangulation, semi-structured interview, focus group discussion, document analysis, analysis of study programmes and vocational training programmes are used to reveal these causal relationship. It is aimed to reveal how an individual seeks to retrain or extend his/her existing qualification by choosing vocational training. Two study instruments were used: interview composed of 7 questions, which allowed to reveal the process of the individual‘s career planning, and 4 questions for the discussion in a focus group, which provided additional information about the phenomenon. People who acquired higher education immediately after graduating from secondary school and continued their studies at a vocational school are key informants of the study. 3 men and 9 women were interviewed during the study. They were grouped by the level of their qualification: from bachelor to residency. 2 focus group discussions in different vocational schools were carried out (36 teachers). Participants of the focus group in each school were selected by their experience with the studied phenomenon. A content analysis was used to analyse the study data.

Findings

The study distinguished 3 key periods, revealing the career change phenomenon: transition of graduates from secondary school to higher education institution; study experience until choosing vocational training; the process of choosing vocational training and experience of studying at a vocational school. Quotes from the interview (In) and the focus group (FG) are provided.

1st period. Identification of factors, determining the choice of higher education, which include: family, society, employers and educational institutions (secondary school, higher education institution and vocational school). Influence of society is reflected by the dominant stereotypical views that higher education in mandatory in order to enter the labour market.

In. „<...> more people enrolled to higher education institutions, everybody spoke of the need for higher education, that without higher education you will work as a cleaner, you will earn nothing. It is just necessary. Higher education is mandatory.“ (J4). Some secondary school graduates see the requirements posed by employers by analysing employment ads, In. „<...> as far as I read different ads, employers are looking for people with higher education <...>.“ (J6), and others linked the choice of studies to continuous activity after school. In. „It was just a continuation of what to do after school and I did not think about job at that time because it seemed very far away <...>“ (J2).

Influence of secondary school community is reflected by misleading and directing professional guidance. In. "And if, God forbid, you got a lower mark or you are not so good in some subjects, you are always threatened that you will be studying at a vocational school and then your life will probably end." (J2), due to the aim to raise the school's ranking in the society. FG. „<...> secondary schools, especially gymnasiums, are ranked and one of the criteria is how many graduates enrolled to universities and, of course, the school wants to look good in the eyes of the society, because it brings money to it." (A5). Focus group discussion data demonstrated that vocational schools themselves are passive in the area of marketing, while higher education institutions actively provide misleading marketing about qualifications provided. FG. „...Study programmes offered by higher education institutions just sound good, their titles really sound good, but when you have to find a job then the problem arises." (B1). Despite the distinguished factors, family has the greatest influence on the choice of higher education, where especially active role is performed by mothers. In. „Maybe I just should take more time to decide on where and what I would like to do, but I felt a lot of pressure from my parents, especially from my mom, that I should not take any breaks because then it would be very difficult to start learning again." (J8). It should be emphasised that the identified factors influenced secondary school graduates only when they did not discover themselves in professional activities. The study revealed the choice of study programmes mainly depends on the state examination results. In case of the failure to enrol to the desired study programme, other choices were based on the aspiration to enrol to any study programme. Choices of those individuals were determined by the price of studies. The identified factors show that studies chosen by the informants do not have a reasonable basis for their career development in the future.

2nd period reveals experiences of studying in higher education institutions, which had an impact on further career planning. There are three processes of experience: self-awareness; maturation and analysis of the labour market. The process of labour market analysis involves both practical experience in the labour market (requirements posed by employers when trying to get a job) and theoretical (analysing the situation in the labour market, which reveals the supply of individuals). In. „... one hundred vets are prepared per year, which is way too many for Lithuania." (J7). The process of self-awareness involves both awareness of one's personal characteristics and awareness of oneself as a future professional in the chosen study programme. Most of the students realised during the study process, especially during practice, that they will not link their future with the chosen qualification. In. „...I liked my studies, but after graduating I realised that I really do not want to link my job to history..." (J1). The process of maturity occurs through personal psychological maturity as further career decisions are made on the basis of self-awareness rather than the influence of family or society.

In. <...> I am no longer a secondary school graduate, I have already graduated from the university and I have my own plans, and I start to live independently and think for myself. (J8). It is revealed that the higher education institution acted as a maturity institution for students, i.e. secondary school graduates have not yet discovered themselves, had no need for the labour market analysis and were influenced by the family in making career-related decisions. However, all these processes have been changed in the higher education institution. This suggests that adequate career decisions are taken later, when individuals have more independence from their families and more life experience.

3rd period revealed the reasons for the choice of vocational training. Based on the experience gained in the higher education institution, some students decided to prepare a backup plan, if the first one fails. In. „<...> I always have a backup plan in my life. You will learn not only in your field, but you go to another field because you are afraid of the failure. (J11). At the same time it is aimed to access such social guarantees as allowance or public transport incentives during the study period. In. „In fact, I am an orphan and I get money from the state as long as I am studying and turn 24." (J11). In some cases the choice is determined by the need for the improvement at work required by employers. In. „If there was no requirement for that hygiene standard at the office, I would not be here <...>" (J9). Awareness of professional vocation has become the reason for the majority of the informants to change their career direction by choosing vocational training. A discovery of a vocation was based on the analysis of the previous experience, looking for an answer which activity was successful and satisfying. In. „<...> I had the opportunity to work in Retriever kennel for three summers, which I believe also had a great influence <...>" (J8). The choice of vocational training is linked to the fulfilment of dreams in professional activities. FG. „...finally, I will do what I want, I used to hear even such words. I will do what I want and what I have dreamed of..." (A3). Although at the same time, the choice of other informants is associated with self-discovery in the hope that the chosen occupational area will be a niche for the realisation of their potential. In. „<...> I just wanted to enrol and succeed." (J3).

Additional analysis of higher education study programmes and vocational training programmes revealed the significance of the choice of vocational training on the extension of career opportunities. The informants, who decide to be retrained on the basis of their current qualification, link their future to business establishment. Others aim to extend their higher education qualification for the opportunity to get additional activities at work and thus generate additional income.

Discussion

The analysis of the career change phenomenon when higher education graduates choose vocational training revealed a real-life context that includes both the factors, determining the choice of higher education, and processes during studies, which have an impact on the emergence of the phenomenon (see Figure 1).

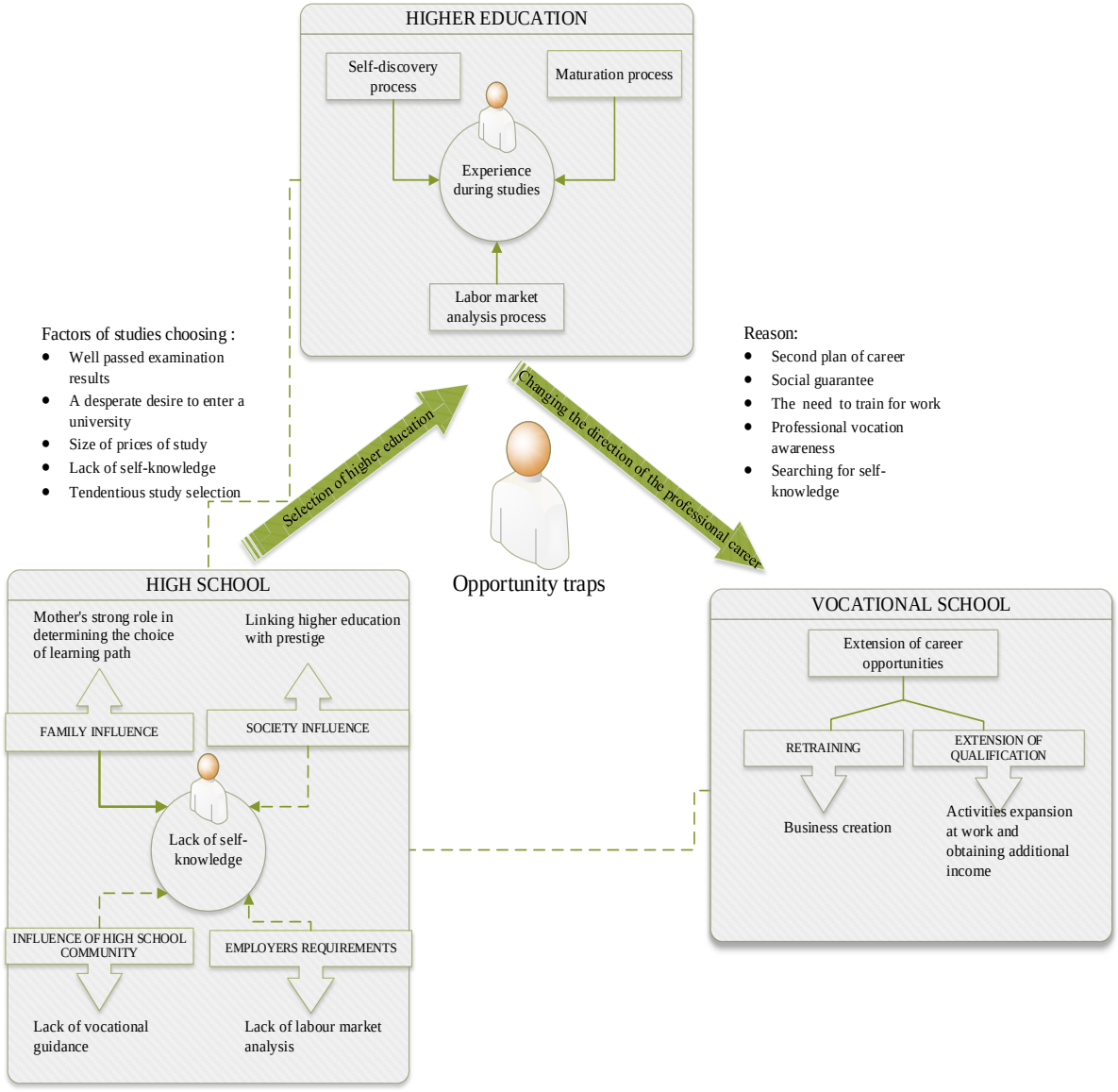

Figure 1 **Process of changing career direction of higher education graduates**

The highlighted aspects of the influence of educational institutions confirm and at the same time complement factors revealed in the theoretical part. The influence of the secondary school community on the professional decision is

reflected by the lack of experienced professional guidance and stigmatisation of vocational training, which is also argued by Tutlys (2013) and Stasiūnaitienė et al. (2013). At the same time, the study revealed the factor associated with the aim to look prestigious and maintain the necessary number of students by guiding pupils to higher education institutions. Human resources-related objectives of the Lithuanian progress strategy "Lietuva 2030" had an impact on the formation of active career counselling and guidance focused mainly on higher education institutions. Meanwhile, vocational education and training system faces the lack of external communication with students and cooperation with social partners. These disadvantages contribute to the negative attitude towards vocational training in the country.

The study revealed the influence of the family and particularly the mother's role as the strongest factor, determining the secondary school graduate's choice of professional path. This is due to the desire for social mobility, the ambition to secure the desired position in the society (Tutlys, 2013). The adjusting aspect of the influence of the family has emerged: the strong role of the mother, which is strongly expressed by forbidding to choose vocational training. Interest of secondary school graduates in the labour market is based solely on rumours and browsing through employment ads. Secondary school graduates are not familiar with the concept of the labour market analysis, and the choice of higher education is more associated with continuous activities after school. It is observed that the acquisition of higher education is associated with the creation of the added value in the competition for qualified job positions, so it changes Stasiūnaitienė et al.'s (2013) perception that the acquisition of higher education provides a guarantee that one will not be unemployed. This shows that young people are beginning to understand the disappearance of boundaries between higher education and vocational qualifications in terms of employment.

The study demonstrated that secondary education graduates are influenced by surrounding factors when choosing their studies rather than self-awareness. They linked graduation from the higher education institution to meeting expectations of their family by bringing them a diploma. The study revealed that the completed study programmes when chosen accidentally or because of the attractive study price, do not have a reasonable basis for further career planning.

The analysis of the career change phenomenon revealed an important moment of maturity and self-awareness during the study period. This period is associated with the corrective actions and decision made previously in the secondary school. Moreover, during studies at the university or college students better understand requirements of employers as well as the importance of practical skills, which also makes them to reconsider their career plans.

The revealed reasons for the choice of vocational training are justified by the study conducted by Harris et al. (2006) who distinguishes the internal awareness of professional vocation, requirements posed by employers, preparation of a backup plan as the reasons for the career change. There are combinations of even several reasons, determining the change in career direction by choosing vocational training. Typically several years of studies at university or college were needed for young people to understand what professional career they want to develop. During the study period, students discovered themselves through internships or other practical activities.

It is important that the choice of vocational training made by study participants is based on pragmatic values distinguished by Januškevičienė et al. (2012). These values are distinguished in the context of a career when retraining or expanding the existing qualification. Retraining higher education graduates link their professional future to the establishment of business, while those expanding their higher education qualification aim to generate addition income and expand activities at work.

Conclusions

1. Lithuania is still dominated by the transitional model of high skills formation when the supply of high skilled labour force does not meet the demand of jobs. However, following the strategic national objectives influenced by the EU policy in education and human resources development, Lithuania has a very strong public opinion that the best career opportunities are available after acquiring higher education. The tendency, yet, indicates, that the country needs improvement of its career counselling system, which is the weakest at the level of secondary education.
2. The study revealed the prevalence of macro and micro factors, making highly qualified individuals to fall into the opportunity trap. Macro factors include the family, society, employers and educational institutions (secondary schools, vocational schools and higher education institutions). The career choice of secondary school pupils is influenced by the stereotypical opinion on the unavoidable need for higher education studies. This opinion prevails at all levels. Micro factors emerged on the basis on macro factors as pursuit for prestige, diploma and high salary. The study revealed that accidentally chosen study programmes rarely form a solid basis for the development of the acquired qualification in the future. This is influenced by the lack of self-awareness, state examination results, fear to disappoint family members and other factors.

3. Reasons for the choice of vocational training are associated with the experiences gained during the study period, such as self-awareness, maturity, the need for the labour market analysis and self-discovery in professional activities. The study distinguished the reasons, determining the choice of vocational training: learning more about and understanding a specific vocation, coming across the requirements posed by the employers for qualification development, preparation of a backup plan. The case studies disclosed that higher education graduates which participated in the retraining actions (acquired different qualification at VET than that at university or college), associated their professional future with the establishment of business, while those, extending their higher education qualification (acquiring qualification close or similar to that gained at university/college), seek additional income and new activities at work.

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ЭВФЕМИЗМЫ КАК СРЕДСТВО МАНИПУЛИРОВАНИЯ В ПЕДАГОГИЧЕЧСКОМ ДИСКУРСЕ

Euphemisms as a Means of Manipulation in Pedagogical Discourse

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Abstract. *Nowadays a language presents a great interest not only as an independent phenomenon but also as a means of communication. In the course of a verbal communication between interlocutors there is an exchange of information as well as a manipulative influence. The latter is one of the main elements of an effective educational process.*
Euphemism is a mild or indirect word or expression substituted for one considered to be too harsh or blunt when referring to something unpleasant. It is the act or an example of substituting a mild, indirect, or vague term for one considered harsh, blunt, or offensive. Euphemisms with communicative function of evasiveness, politeness, and concealing, play dual parts in everyday social lives. Euphemism, a kind of polite language, can combine the teachers' role and the students' personalityfactors together.
A verbal manipulation made by a teacher-manipulator with the help of euphemisms promotes improvement and an effective transformation of all the components moving an educational process forward. It regulates a positive interpersonal communication between a teacher and a student as well as within the class; it influences the work with the educational material and its further presentation; it creates a favourable working atmosphere during the lesson.
Keywords: *euphemism, manipulation, educational process, teacher's role, student's personality, pedagogical discourse.*

Введение
Introduction

Эвфемия представляет собой сложный социальный, психологический, когнитивный и собственно лингвистический феномен. В последнее время использование эвфемизмов в различных видах дискурса отличается особой интенсивностью, они получают исключительно широкое распространение в значимых сферах речевой деятельности. В педагогическом дискурсе, значимость которого заключается в комплексности видов общественной деятельности – в виде обучения учащихся, демонстрирования обучения, распространения идей и формирования знаний, которые осуществляются с

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помощью языка – использование эвфемизмовкак коммуникативной стратегии является актуальным.

Цель настоящей статьи заключается в попытке рассмотрения использования эвфемизмов в качестве манипулятивного средства в педагогическом дискурсе.

Теоретическая основа темы
The theoretical background

Эвфемизмам, как особым языковым единицам, посвящены многочисленные работы, выполненные как отечественными, так и зарубежными лингвистами (см. работы Кацев, 1988; Ковшова, 2007; Москвин, 2007; Сеничкина, 2006; Шейгал, 2000; Holder, 2003; Rowson, 2002; Warren, 1992; Williams, 1975 и др.). Исследователи рассматривают категориальный статус эвфемии, сферы употребления, разграничивают эвфемизмы и смежные явления, составляют многочисленные классификации. Лингвистамитакже изучались их тематические и структурные особенности, функциональная направленность, употребление в различных типах текстов и т.д.

В последние годы возрастает внимание ученых к явлениям языковой действительности, важной составляющей которых является понятие имплицитности, скрытого смысла. Эвфемизмам свойственна имплицитность, т.е. формальная невыраженность прагматической информации, которая в них содержится. Для понимания глубинного скрытого смысла производится дешифровка, интерпретация истинных коммуникативных намерений говорящего, того как говорящий воздействует на своего адресата, прибегая к использованию эвфемистической замены, и каким именно образом коммуниканты интерпретируют устные и письменные тексты.

Д. Н. Шмелев определяет *эвфемизм* как «слово или выражение, служащее в определенных условиях длязамены таких обозначений, которые представляются говорящему нежелательными, невполне вежливыми, слишком резкими» (Шмелев, 1997, 199).

Главная функция эвфемизма – *смягчение* смысла сказанного. Таким мы представляем понятие «эвфемизм», но существует и два других родственных термина, тесно связанных между: эвфемия и эвфемизация. Термином «эвфемизм» обозначаются слова или выражения, применяющиеся для замены грубых, нетактичных, невежливых обозначений.

Кроме того, в современной лингвистике развивается также коммуникативное понимание эвфемизма: эвфемизм как речевой акт – непрямое обозначение какого-то предмета илиявления, называть которое его прямым именем в данной обстановке неудобно, неприлично, не принято. Эвфемизм – это «факт языка, ориентированный на речевую коммуникацию» (Шмелев, 1997, 199).

Термин «эвфемизация» же тесно переплетается с двумя другими процессами: а) с номинацией, как инструментом создания эвфемизма и б) с оценкой. Помимо того, эвфемизацией можно назвать и сам процесс насыщения речи эвфемизмами. Под «эвфемией» понимается «речевая стратегия, призванная помогать достижению различных целей: созданию коммуникативного комфорта, преодолению коммуникативных неудач и других, с помощью определенных задач общения» (Шляхов, 2013, 107).

Причина эвфемизации речи – избегать конфликтности общения, цель – не создавать усобеседника ощущения коммуникативного дискомфорта, что является особенно важным в педагогическом дискурсе.

Изучение педагогического дискурса проводится сегодня в нескольких плоскостях и в соответствии с основными научными парадигмами современной лингвистики, в частности, выделяются структурно-функциональный, лингвокультурологический, коммуникативно-дискурсивный подходы (см. работы Жесткова, 2016; Карасик, 2002; Леонтьев, 1999; Михальская, 1998; Олешков 2007 и др.).

Педагогический дискурс – это объективно существующая динамическая система ценностно-смысловой коммуникации субъектов образовательного процесса, функционирующая в образовательной среде (Катермина, 2017).

Цель педагогического дискурса носит, как и цель образованияв целом, трехкомпонентный характер: в профессиональной области – формирование ключевых компетентностей участников образовательного процесса, в общественной жизни –полноценная социализация личности в обществе, в личностной сфере – становление личности. Характеристика участников педагогического дискурса включает анализ их статусно-ролевых функций, мотивов, ценностей, профессионально значимых личностных качеств, индивидуальной интерпретации смыслов.

Ценностная ориентация участников педагогического дискурса сводится «к признанию и закреплению моральных ценностей общества, специальных ценностей педагогической этики, соблюдению социальных традиций, зафиксированных в систематизированном знаниизаконов общества и природы, раскрытию содержания основных концептов педагогического дискурса» (Суворова, 2012, 85).

Педагогический дискурс представляет собой специфический тип межличностного общения, в сферу которого включены учитель, ученик, а также учебный материал, на базе которого, в основном, имеет место учебный диалог. Этот материал – учебный текст несет уже сам по себе мощный образовательно-воспитательный потенциал и представляет собой депозитарий культурного наследия, квинтэссенцию накопленных человечеством и дидактически препарированных знаний. Но его усвоение и осмысление непосредственно связано не только с имплицитно содержащейся в учебном тексте эмоционально заряженной информацией, но и с эмоциональным состоянием речевых партнеров, главных агентов дискурса: адресанта, старающегося эмоционально преподнести, раскрывая и усиливая этот эмоциональный потенциал; и адресата, пропускающего интеллектуально-эмоциональную информацию через свое «эмоциональное сито». Положительные эмоции выступают фасилитатором иллокутивности текста, т. к. «эмоциональный луч» высвечивает главную мысль сообщения, которая, проходя через эмоциональную сферу, чувственную, биодинамическую ткань сознания обучаемого, усваивается на уровне личностного смысла. В то же время, отрицательный эмоциональный настрой может служить своеобразным «тормозом», барьером для понимания и запоминания учебной информации.

Образно педагогический дискурс можно представить в виде многоцветной речевой ткани, которая плетется в пространстве общения по мере развития речевого взаимодействия, образуя неповторимое сочетание языковых оттенков и культур, обусловленные индивидуальностью участников коммуникации.

Методы исследования
Methods of the research

Методы, использованные в статье, определены спецификой изучаемого предмета и поставленными задачами. Нами были использованы *описательный метод*, включающий наблюдение, интерпретацию, классификацию материала, *структурный метод* с целью выявления языкового воздействия и представления манипулятивных стратегий тактик и речевых приемов, а также *метод дискурс-анализа*. Для работы с корпусом примеров мы применили *метод сплошной выборки.*

Прагматический подход, изучающий отношения между языком и говорящим, и причины, по которым автор высказывания выбирает то или иное языковое средство, исследует цели употребления эвфемизмов. Социолингвистический подход позволяет сделать выводы о возможности

функционирования эвфемизов в разных жанрах речи, о типах дискурса (в нашем случае педагогического дискурса), в которых они употребляются; наблюдение за частотой их употребления в той или иной сфере коммуникации помогает установить различия в употреблении эвфемизмов представителями разных социальных групп (учителями и учениками).

Материал, анализ и результаты
Data, analysis and results

Материалом исследования послужили аутентичные высказывания преподавателей и учителей в сфере гуманитарных и естественно-научных дисциплин, которые были собраны в результате посещения лекционных и практических занятий (более 100 часов) для изучения манипулятивных внутренних ресурсов и возможностей эвфемизмов в педагогическом дискурсе. Проанализированные нами манипулятивные тактики и речевые приемы, привлеченные для их осуществления, были реализованы в учебном процессе учащихся гимназий г. Краснодара, а также Кубанского государственного университета. Все группы были гендерно-смешанными, в группах отсутствовали учащиеся, требовавшие особого подхода в силу причин, связанных со здоровьем, религией или неблагополучием семьи. Очевидно, что при работе с такими учениками требуется привлечение специфических педагогических методов преподавания и манипулятивных техник

Манипуляция в педагогической коммуникации – это непременная часть школьного общения. Класс далеко не однороден по составу, перед учителем находятся дети с очень разными способностями и характерами.

Но работать необходимо со всеми, поэтому начинается тонкая психологическая игра, в которой часто приходится использовать различные средства манипуляции.

Языковое манипулирование оказывает влияние на различные рычаги личности: оно может быть адресовано ее рассудку, самолюбию и другим личностным характеристикам и эмоциям.

Для достижения целей обучения с дополнительным коммуникативным эффектом и дальнейшей гармонизации отношений в классе учителя могут применять эвфемистические выражения в следующих ситуациях:

1. Применение эвфемизмов при постановке вопросов.

Очень часто учителю приходится сталкиваться с такой ситуацией, когда в классе возникает дискомфорт и нежелание со стороны учащихся отвечать на вопросы. Использование эвфемизмов в данном случае может повысить интерес студентов к данной теме и создать чувство доверия к учителю. Формулирование вопросов при помощи эвфемизмов может

помочь студентам почувствовать себя легко и комфортно. Например, когда учитель задает вопрос с надеждой на его ответ застенчивых или сомневающихся в себе студентов, он может сформулировать его следующим образом: *Не могли бы вы высказать свое собственное мнение по этому вопросу? Попробуйте. Я уверен(а), что вам есть что сказать*. В сочетании с мягким и вежливым тоном учитель дает возможность студентам отвечать на вопросы охотно. Данный прием позволяет создать доверительную обстановку между учителем и учеником и устраняет страх при высказывании собственного мнения в обществе.

2. Применение эвфемизмов при комментировании результатов тестов и контрольных работ.

Тест логично рассматривать как стандарт для проверки обучения студентов, что, в свою очередь, не может не вызывать тревогу и обеспокоенность со стороны студентов в плане оценки. Вследствие этого, важную роль должен играть «правильный» комментарий как часть учебного процесса, обеспечивающий необходимый педагогический эффект.

Так, например, использование предложений типа *Вам следует более серьезно отнестись к учебе и я уверен(а), что в следующий раз у Вас будут лучшие результаты* или *Я думаю, у Вас были определенные причины, которые помешали более успешно написать этот тест* или *Боюсь, что сегодня Вы будете разочарованы результатами. Но уверен(а), что в следующий раз у Вас все получится* позволит учащимся почувствовать себе более уверенными. Более того, данные конструкции имплицитно «защищают» самооценку студента как перед ним самим, так и перед его товарищами.

3. Применение эвфемизмов при исправлении ошибок.

Ошибки неизбежны при обучении и существует множество приемов и техник, которые используются учителями. Особенности в поведении учителя могут быть связаны с политикой учебного заведения, личности самого учителя, даже культурой страны.

Некоторые учителя, будучи авторитарными личностями, считают необходимым исправлять каждую ошибку, используя императивные конструкции с отрицательной коннотацией (*Вы неправы!* или *Вы опять допустили эту ошибку!*), таким образом, создавая ситуацию дискомфорта.

Косвенный и вежливый способ указания на ошибки студентов позволяет не только исправить неправильный ответ, но и не повредить их самооценки. Так, например, использование следующих эвфемистических конструкций позволит создать гармоничную среду общения между учителем и учеником и привести к эффективной работе:

Мне кажется, вы не достаточно уделили внимания этому правилу ….

В следующий раз будьте более внимательны….

Я полагаю, что в этом предложении Вы сделали ошибку.

Я уверен(а), что Вы нервничаете, и только поэтому допустили ошибку.

Таким образом, манипулятивный потенциал эвфемизмов в педагогическом дискурсе позволяет создать комфортную обстановку в классе, улучшить эмоциональный настрой студентов, привести к боле эффективному педагогическому процессу во время занятий.

Обобщение
Conclusions

Педагогический дискурс, имеющий информационные, семиотические, антропологические и культурологические истоки, рассматривается учеными не только как продукт деятельности, но и как процесс его создания, и эффективность протекания этого процесса определяется целым рядом внешних и внутренних факторов. Внешние факторы обусловлены социальной и образовательной средой, в которой создается и функционирует педагогический дискурс, а внутренние факторы связаны с личностными качествами и установками субъектов образовательного процесса.

Целостность процесса проектирования педагогического дискурса зависит, таким образом, от объективных и субъективных оснований деятельности педагога, от понимания его действий по преобразованию предложенных ему извне целей, содержания, технологий и критериев оценки образования в его собственную, субъективную авторскую модель педагогического дискурса с индивидуально осмысленными и переработанными целевыми, содержательными, процессуальными и критериальными характеристиками, адаптированными к его собственному, авторскому видению педагогической реальности.

В настоящее время язык представляет большой интерес не только как самостоятельное явление, но и как средство общения. В ходе устного общения между собеседниками происходит обмен информацией, а также манипулятивное влияние. Последнее является одним из основных элементов эффективного учебного процесса

Мы считаем, что вербальная манипуляция, произведенная учителем-манипулятором, способствует улучшению и эффективной трансформации всех компонентов, продвигающих учебный процесс. Она регулирует положительную межличностную связь между учителем и учеником, а также внутри класса; влияет на работу с учебным материалом; создает благоприятную рабочую атмосферу во время урока

Применение эвфемизмов в учебном процессе устанавливает гармоничные отношения междуучителем и учеником. Обеспечивает эффективное обучение и способствует оптимизации учебного процесса.

Summary

Euphemism is a mild or indirect word or expression substituted for one considered to be too harsh or blunt when referring to something unpleasant. It is the act or an example of substituting a mild, indirect, or vague term for one considered harsh, blunt, or offensive. Euphemisms with communicative function of evasiveness, politeness, and concealing, play dual parts in everyday social lives. Euphemism, a kind of polite language, can combine the teachers' role and the students' personalityfactors together.

The study of pedagogical discourse is done in some directions and according to main scientific paradigms of contemporary linguistics: structural-functional, linguaculturological and communicative-discursive approaches.

We consider pedagogical discourse to be an objective dynamic system of an evaluative and meaningful communication between interlocutors of an educational process. This system mainly functions in an educational environment.

Nowadays a language presents a great interest not only as an independent phenomenon but also as a means of communication. In the course of a verbal communication between interlocutors there is an exchange of information as well as a manipulative influence. The latter is one of the main elements of an effective educational process.

We believe that a verbal manipulation made by a teacher-manipulator promotes improvement and an effective transformation of all the components moving an educational process forward. It regulates a positive interpersonal communication between a teacher and a pupil as well as within the class; it influences the work with the educational material and its further presentation; it creates a favourable working atmosphere during the lesson.

We suppose that the problem of manipulative internal verbal resources of euphemisms is actual which requires a comprehensive analysis and further study. The results can lead to the bettering of teacher-pupil's relations and improvement of knowledge in the realms of pedagogical discourse.

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EFFECTIVENESS OF THE DIGITAL IMAGE LIBRARY CASES IN HUMAN ANATOMY STUDIES

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Abstract. *In several education technologies and options for teaching and studies one of the alternatives is the Anatomage 3D virtual dissection table with included Digital Image Library. The aim of this study was to observe the effectiveness of the Digital Image Library cases in Human Anatomy studies at Rīga Stradiņš University (RSU). In 2017 it was used every second week during the autumn`s practical classes on several occasions to show variety of interesting and many unique human anatomy cases, abnormalities, diseases and detailed sectional scans. As methods for collecting data were used discussions between students groups and survays. The sample included 100 students and 1 Human Anatomy tutor. The findings suggest that the Digital Image Library cases are very interactive and effective tools of the teaching and studies in Human Anatomy at RSU. This is a new form of the communication between students, tutor, virtual reality of the body systems and it provides a lot of digital materials that develop relationships between basic and clinical study subjects.*
Keywords: *Anatomage, Digital Image Library, effectiveness, Human Anatomy, study process.*

Introduction

Today digital technologies are becoming an integral part of education and they quickly increase in number, variations and size. With increased numbers of students from undertaking University programs of study, part of students are better skilled to access and effectively utilise new technologies to support their study process and learning (Rizollo et al., 2010). The Universities are now tending to provide a broader range of different educational methods but at the same time students are expected to undertake more independent learning (Mutalik & Belsare, 2016).

Rīga Stradiņš University (RSU) offers its students the 3D Anatomage Virtual Dissection Table (Medical education, 2016) at the Department of Morphology.

Today it is the most technologically advanced anatomy visualization system. In Virtual Table are included a lot of options, possibilities and one of them is the Digital Image Library that comprises very well organized collections and different types of information. The Anatomage Digital Image Library contains different human anatomy cases, including detailed regional scans and interesting medical

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pathology cases (Paech et al., 2017). It also contains an interesting animal anatomy cases, including detailed cross sectional scans and full body scans (Custer & Kimberly, 2015).

The aim of this study was to observe the effectiveness of the Digital Image Library cases in Human Anatomy studies at RSU.

Material and Methods

The study took place at Department of Morphology of the RSU. In 2017 Digital Image Library was used every second week during the autumn`s practical classes on several occasions to show variety of interesting and many unique Human anatomy cases, abnormalities, diseases and detailed sectional scans. As methods for collecting data were used discussions between students groups and survays. The sample included 100 students and 1 Human Anatomy tutor.

Students from two faculties have been involved in the study. The age group ranged from 18 to 25 years. In all classes Digital Image Library was used and supported for students learning. Students were distributed in two groups A and B. The first group consisted of 66 students of the Faculty of Dentistry and 34 students of the Faculty of Medicine. Group A and group B learnt anatomy and stuctures of the head, neck, thorax and abdomen. Group A focused more on anatomy and stuctures of the head and neck. Group B studied all of the mentioned parts of the body but with more larger amount of the anatomical structures and details of the abdomen.

Fig. 1. **Screen and overview of the Anatomage**

At the end of each practical class the tutor performed a discussion session with the students about increasing of their knowledge and an effectiveness of the Digital Image Library in Human Anatomy studies.

The students were also asked if they had ever used the Anatomage (Fig. 1) and the Digital Image Library. Lastly, the comparison of the types of learning and satisfaction of the students were explored.

Results

In our article we are presenting the results of a survey aimed to answer to the question: „Did the Digital Image Library has an impact on the students` learning?"

The viewpoints of students and tutor about the role and functions of Digital Image Library in all of cases were similar and positive (Table 1).

Table 1 **Students` views on effectiveness of the Digital Image Library cases in Human Anatomy studies**

Type of view	**Students (n=100)**
	Effective or very helpful,%
supports the virtual dissection	95.5
determines 3D visualization of the structures	74.1
deepens understanding of Human Anatomy	77.8
helps to understand the relationships between structures	90.0
helps to understand different abnormalities	84.8
helps to understand the effects of diseases	65.5
prepares for analysis of clinical cases	80.3
makes learning and education more interesting	100.0
helps to use correct anatomical terminology	55.5
helps to review level of knowledge	64.8

n - number

The majority of students agreed that training with Digital Image Library (Fig. 2) gave better results than a demonstration of dissected structures in the books, anatomy atlases and presentations.

Majority of the students mentioned that they received fast and economical access (saved materials and time) to the content of the Digital Image Library and easily performed communication between different facilities without loss of the information or speed somewhere. The students touched only screen with content of the Digital Image Library and the images were annotated, rotated 360 degrees, cutted in any plane, and layered to demonstrate structures layer by layer.

The Digital Image Library allowed to students to learn anatomy through a high-quality and interactive 3D tool, offered cases from many sources and in

different formats. Virtual anatomy served as a wonderful tool for dissected procedures.

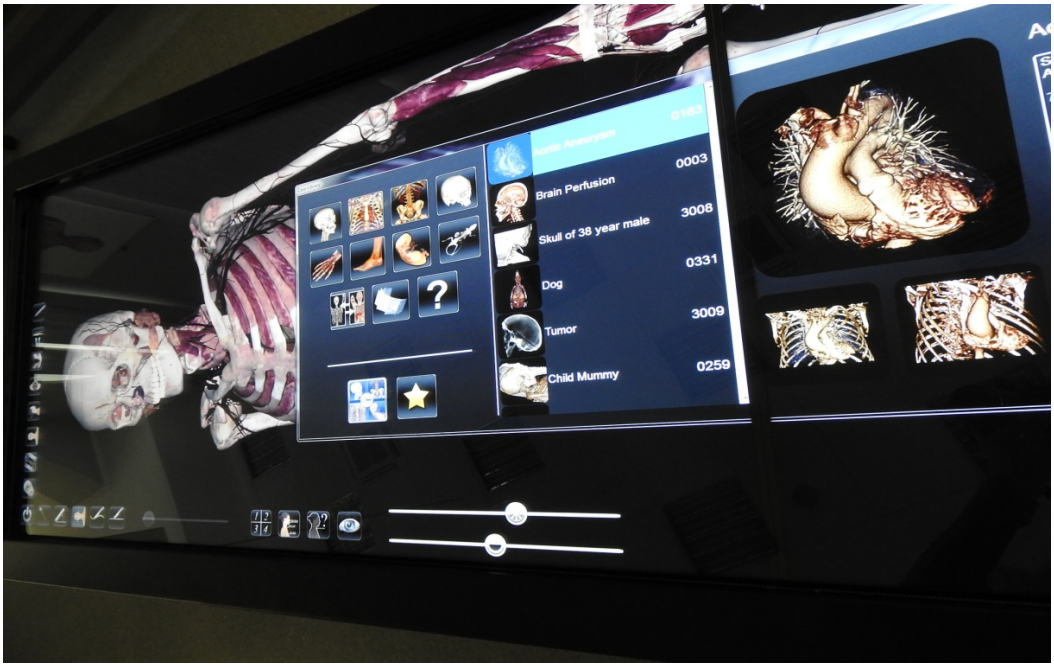

Fig. 2. **Some virtual options of the Digital Image Library of the Anatomage**

The use of Digital Image Library made cases much more visible (Fig. 3). Many interactive functions allowed the students and tutor to rotate or tip the visible models, removed or added layers of anatomy from skin to bone and label any structure (Fig. 4). Simple edit functions allowed animation to use the pictures in the educational presentations.

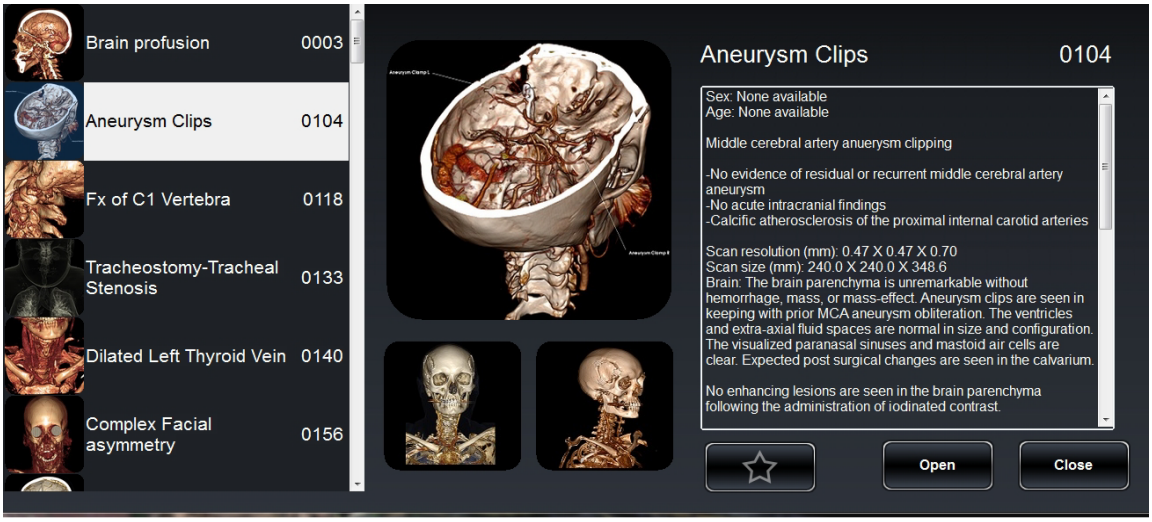

Fig. 3. **Part of the content of the Digital Image Library**

The Digital Image Library included a lot of pathological examples. There were several descriptions together with skull, head and neck cases, thorax, abdomen and pelvic cases, upper and lowere limbs cases, veterinary, mummy and Embryology cases.

Fig. 4. **Some interactive functions using and analysis of cases by students and tutor in practical class**

It offered comparative study cases with synchronized dissections of multiple cases and opened three related cases at a time. The user interface made it easy to search fo scans by regions of the body and included notes on each case. Many scans were included in the Digital Anatomy Library. The 3D and 4D scans were rotated in any direction to truly show medical devices in a new and intuitive way.

Tutor demonstrated to students of all ranges the location and functions of different virtual instruments. The users explained fractures of the bones and different unique case examples.

Our study underlined the positive impact of the integration of innovative solutions in learning anatomy. The virtual Digital Image Library environment was useful to help students and tutors identify different normal and pathological anatomy structures and topographical relationships between them.

Most of the students rated positively the content of the Digital Image Library and they concentrated their focus on structures of organs and relations among organs. The students were positive about integrating of the Digital Image Library into anatomy teaching. They evaluated their own learning goals and underlined the importance of Human Anatomy learning in clinical practice in future.

Discussion

The major changes are happening across the educational system and they affecting all aspects of teaching and learning at the moment. These changes allow and offer new digital learning environment and several opportunities to Universities (Tanasi et al., 2014). The use of medical imaging in teaching anatomy is widely increased (Brazina et al., 2014; Grignon et al., 2016; Lufler et al., 2010). Nowadays, the different educational sources are available on the internet and students can easily access them (Hopkins et al., 2011; Khot et al., 2013). There is a lot of information in the literature in regard to how the use of different technologies are impacting students' learning (Kerby et al., 2011; Kurt et al., 2013; Sugand et al., 2010).

The course of Human anatomy at RSU is organized in three semesters for students of the Faculty of Medicine or two semesters for students of the Faculty of Dentistry. The first part of the course focuses on gross anatomy of the bones, joints, muscles and organs. The second part focuses on circulatory system, nervous system and Topographical anatomy. Anatomy studies shouldn`t be completed in the 1st or 2nd year of University. The process of understanding and studies of the Human Anatomy should continue in the 3rd, 4th, 5th and 6th year by means of optional and elective courses such as Topographical anatomy or Clinical anatomy.

There are many definitions of a Digital Library (Zarghani et al., 2015). Users are of varying backgrounds and cover a wide range of expertise in Human Anatomy and computer skills. Digital Library functions today are different from what we have experienced in the past and we can expect in the future. What is common to all definitions, is the use of new technologies, of digital collections and the access to services and resources. Different users can perform different interpretations of the digital information. It combines the structure and gathering of information. Many authors have underlined that the integration of images with anatomical structures improves the development of professional competences (Azer & Azer, 2016; Hoyek et al., 2014).

This article describes the effectiveness of Digital Image Library for students learning and the importance of design to enable different types of learning. The Digital Image Library of the Anatomage stores, preserves, distributes and protects contents in different formats and, at the same time, it allows activities between the users and the contents. Part of the content of the Digital Image Library can be easily embedded into anatomy lectures, plans of the practical lessons or handouts. The role of knowledge construction of the students in learning is really significant (Anand & Singel, 2014). Our teaching practice made clear how important is the active participation of the students in the teaching – learning process.

Students evaluated the importance given during study to Morphology, relations and variations of organs, the usefulness and an effectiveness of Digital Image Library in preparing different anatomical tasks. The characteristics that makes active study process attractive for teaching purposes and reference tools are also what help to make the Digital Image Library accessible and easy to use by a variety of users.

Conclusions

The findings suggest that the Digital Image Library cases are very interactive and effective tools of the teaching and studies in Human Anatomy at RSU. This is a new form of the communication between students, tutor, virtual reality of the body systems and it provides a lot of digital materials that develop relationships between basic and clinical study subjects.

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PROFESSIONAL SOCIALIZATION OF NOVICE TEACHERS: BETWEEN THE CULTURE OF ACADEMIA AND THE WORKPLACE CULTURE

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Abstract. *This paper discusses the outcomes of the first stage of conducted qualitative research on professional socialization of novice teachers. The presented analysis refers to the transition period from the role of a student to that of an employee and uncovers the less well-known empirically side of the coin in teacher training with regards to professional socialization of novice teachers – the perspective of constructing one's professional path at the intersection of two cultures: the culture of academia and the workplace culture.*
Keywords: *professional socialization of novice teachers, transition period, transition, workplace culture.*

Introduction

For many years the period of formal academic education was considered the most important step in the formation of a teacher's professional identity. In recent decades researchers in the field of education have been gradually shifting their attention towards other stages in this type of professional career, including the transition period from academic education to the labour market (Piróg, 2016; Czubak-Koch et al., 2017) and the process of learning the profession in specific workplace cultures (Sabar, 2004; Schartz-Opennheimer & Dvir, 2014; Strom, 2015).

Transition from academic education to professional world poses a great challenge for any young individual; however, in the teaching profession, as Päivi Tynjälä i Hannu. L. T. Heikkinen (2011) highlight, such a transition is particularly difficult. A novice teacher must embrace a full range of duties and responsibilities concerning his work from the very first school day, just as his more experienced colleagues do. This generates a number of problems that may impede the new teacher's effective conduct. Such problems include, for example, a high stress level, a sense of lack of agency and competences, difficulties in establishing positive relationships with students, their parents, other teachers and external institutional partners. Thus, the understanding of the transition process and its various determinants, the limiting of its negative

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outcomes and the creation of a support system at the beginning of novice teachers' careers become very important fields for exploration to researchers in education.

This paper presents the results of the first stage of research concerning the professional socialization of novice teachers conducted with the participation of state-owned school teachers. Due to the limited scope of this paper, the analysis will focus on the transition period only. Other categories/processes that emerged from empirical data have been already explored (Kędzierska, 2015) or will become the subject of further publications.

Conceptual framework

Transition is a significant process for any individual and refers to any phase of life in which some important change in the status of said person (or group) occurs, caused by biological factors, e.g., age, or social factors, e.g., change in the social role and consequently in the status within the social structure. Transition from the world of education to the world of labour is one specific type of transition in human life.

Until the 1980s the process of professional transition was almost exclusively discussed in the context of graduates of vocational and secondary schools since university graduates entered the labour market rather smoothly. Along with easier accessibility to university education in many European countries, including Poland, finding a job became more difficult for people holding higher education diplomas. In the 1990s the transition period embraced the first six months following the formal completion of education, whereas successful transition was perceived as a correlate of three equally important features: economic conditions, individual factors and obtained academic capital. Since the beginning of the 21st century, as indicated by Danuta Piróg (2013), a tendency towards creating transition models can be noted, especially with the employment of the premises of human capital theories and placing stress on the importance of both the level and quality of obtained education.

Concepts of lifelong learning and learning a profession in the workplace, i.e., theoretical frameworks in this paper, have become significant for an in-depth understanding of transition as a process. Analyzing educational determinants of the transition process, Kathryn Ecclestone argues that "transition is not the same as 'movement' or 'transfer', although it involves both. Instead, transition depicts change and shifts in identity and agency as people progress through the education system (…) effective transitions require a better understanding of how people progress cognitively, emotionally and socially between different subjects at different stages of their learning, and how they navigate the complex demands of different contexts" (2009, 12). Such

concepts also emphasize institutional dimensions and determinants of transition. Researchers agree that when constructing their professional careers people work out individual transition paths/patterns, yet their course is conditioned by institutional paths and normative patterns. As K. Ecclestone stresses, such a course "presents transitions both as the product of social institutions and the outcomes produced by social expectations" (2009, 14).

Methodology and data collection

According to the assumed theoretical perspective, in order to examine the transition process as biographical experience one needs to analyze transformations relating to a particular individual changes with respect to agency and the influence of specific institutional contexts and learning environments in which this process occurs. Such multidimensional analysis of individual experiences and processes, conducted in various organizational cultures, necessitated the choice of constructivist methodology of grounded theory (Charmaz, 2009) as the basic research strategy.

At the pre-conception stage two research questions were formulated that determined the scope of research:

1. What transition patterns emerge from experiences of novice teachers?
2. What are the dynamics and determinants of the process of professional identity re (definition) of novice teachers that occurs at the intersection of the culture of academia and the workplace culture?

Empirical material consisted of 15 narrative interviews conducted with state-owned school teachers, employed in a full-time or part-time mode, for a period not exceeding 3 years. The research group was comprised of 12 females and 3 males, aged 23-27 years.

The first five interviewees with whom I conducted thematic biographical interviews were invited to participate in the study based on the snowball sampling. The analysis of empirical material collected during each interview formed the basis for the identification of analytical categories that made me modify the manner and logic of sampling selection. After having compared particular cases, I selected further participants with the use of the critical case sampling method. For example, because the first five teachers evaluated their starting career capital as low, at the next stage of data collection in the field I searched for participants who declared high levels of their competences at the beginning of their professional careers. In qualitative research the selection of key cases allows the researcher to conduct gradual and permanent comparisons and leads to the saturation of the categories, notions and processes indentified on the basis of the collected data.

Interviews, after having obtained the subjects' consent, were recorded and then transcribed, creating a rich corpus of data. Data analysis was conducted consistent with the methodological procedures of grounded theory (Charmaz, 2009). The process of date analysis was undertaken according to two phases: a vertical analysis in which each of the respondents' interviews was analysed separately. A second phase was then carried out through a comparative or horizontal analysis. In this phase constant comparative analysis was look for common patterns as well as differences.

Studies and afterwards

Transition from the education system to the labour market, as is evidenced in the narratives of the interviewed young teachers, is difficult to plan for and may prove extremely frustrating. The expansion of higher education in Poland within the last two decades resulted in the situation where the entering into the teaching profession became one of the most difficult tasks for graduates during their early adulthood. Increasingly and frequently this process consists in several more or less successful attempts to enter the profession or finding employment, creating a patchwork career pattern (Kędzierska, 2012). This process is illustrated by the following statement of the study participant:

> *I defended my diploma and submitted some job offers. In August I was invited to a job interview and was employed. I was quite surprised that it went so quickly because I had heard a lot how people can't get anything for several years and here almost at once (3) but only for one year and only part-time*. (T/M:1)[1].

Novice teachers' employment difficulties result not only from the lack of job offers, as the study participants' statements prove, but also the fact that every year individuals with similar academic capital appear in an educational labour market that is already saturated with specialists. Consequently, employers more often modify recruitment criteria, and so when assessing a potential employee different types of career capital are taken into account. However, in the light of dynamic changes in the labour market it is particularly difficult, especially in that period preceding the commencement of professional employment, to anticipate which type of career capital should dominate at the stage of education to increase chances for one's success.

The analysis of the transition period described during the interviews allowed for the identification of three transition paths evident in the studied group of novice teachers.

[1]The symbols accompanying the excerpts from interviews are identification codes used in the study, e.g., T – teacher, M-male, F-female, 1 – interview number.

Table 1 **Typology of studied teachers' transition paths – comparative analysis**

Path type	**Interviewee (interview number)**	**Categorization key**
successful transition	T/M:1; T/F:4; T/F:6; T/F:9; T/F:11; T/F:13	- finding employment within 6 months after graduation - full-time employment - possibility to complete professional internship - stable employment prospect - - employment consistent with formal qualifications
sensitive transition	T/F:10; T/F:15	- finding employment in the period longer than 6 months after completing MA level studies - PhD studies combined with employment in the education sector - employment contract for a limited period of time - employment without the possibility to complete professional internship - uncertain prospect of prolonging the employment
uncertain transition	T/F:2; T/F:3; T/M:5; T/M:7; T/F:8; T/F:12; T/F:14	- finding employment in the period longer than 6 months after completing BA/MA level studies - employment contract for a limited period of time; part-time employment and/or based on patchwork contracts - employment at the position inconsistent with formal qualifications - employment without the possibility to complete professional internship - uncertain prospect of prolonging the employment

The first path, represented by 6 participants, is the so-called successful transition, that is finding full-time employment in a state-owned educational institution, with a possibility to complete internship, in a period not exceeding half a year after graduation.

The second path, represented by 2 novice teachers, is the so-called sensitive transition. It is characterized by extending higher level education at the post-graduate studies and simultaneous employment (in various forms) often in non-educational institutions.

The third path, documented in the narratives of 7 novice teachers, is uncertain transition characterized by a long period of seeking employment consistent with one's formal qualifications or the risk of finding an unsatisfactory or unstable job.

The described transition patterns illustrate the phenomenon of the so-called delayed transition (Piróg, 2016) increasingly evident in the teaching profession.

This type of transition has serious personal and professional consequences. The impossibility of finding a job and gaining complete economic independence following the graduation from a higher education institution contribute to delaying other transitions (starting a family, having children, buying a flat, etc.) typical of the early adulthood period, as illustrated by this comment:

> *I managed to find lodgings cheaper than a student dormitory! I am single do not have large needs so it's possible to make a living on this part-time job. No luxuries, but I manage* (T/M:1)

Delayed transitions also result in decisions to prolong the education period (new fields of studies/specializations, post-graduate studies) and have a number of psychological consequences, for example increased passivity and fear to confront the realities of the labour market, decreased assessment of one's professional competences, a sense of grievance and injustice, etc. These difficulties are well-documented in the following excerpt from the participant's narrative:

> *I wrote and sent a lot of these CVs and what nothing, no response, only this waiting I finally found this job completely by accident* (T/F:9)

Part-time employment, combined full-time employment (working in a few schools to obtain full-time number of teaching hours), employment at a position unrelated to possessed qualifications, employment contracts for limited periods of time (a year, a term, several months) prevent a successful transition process. In the recorded statements of the novice teachers I identified problems with becoming involved in the job, absence of identification with the reference group, difficulties with adaptation in disparate/contradictory organizational culture patterns, impossibility to plan one's professional career path, and a sense of losing one's competences, as is evident in this fragment of the interview:

> *This is already my third school. Counting these two years when I worked in telecommunication right after studies it is five years and I'm only just doing internship in this school but I will not work here after the internship anyway because I am a substitution teacher here* (T/F:12)

For young teachers transition from the world of education to the world of the workplace becomes, as in other professions, more and more complex and uncertain. Because the situation in the educational labour market progressively worsens, alternative solutions are sought for – solutions that make education studies graduates drift away from employment in their learned profession. Such a situation not only complicates the quality of novices' professional socialization, but results in, which needs to be stressed, economic losses (costs of teacher education) and social losses (the so-called ghost station – unemployment among young well-educated people).

Threshold effect: Professional socialization of novices in the workplace culture

The transition process does not only embrace the period of seeking employment and a one-time act of its commencement, but also the long and extended in time process of gaining personal and professional independence. For teachers who begin their careers this is the time when the frameworks of professional identities are shaped. This process occurs as a result of the "clash" of two worlds: the world of a particular individual, his or her values, aims, professional concepts and expectations and the world of the school organizational culture.

The first year of work was described by the studied novices as *difficult to grasp* (T/F:2). The narratives of the events of the consecutive days, weeks and months depict the process of professional socialization as one dominated by a need to find points of reference/anchors that would allow novice teachers to "localize" their place in a new situation and transform their temporary identities imposed on them by the professional group. The aim of anchoring in a new culture is to reach a relative, psychosocial stability in the "fluid", complex and unfamiliar reality surrounding the novice. Anchors employed by novice teachers allow them to localize, as Aleksandra Grzymała-Kazłowska states, "their 'place in the world', to formulate their sense of existence and provide the basis for psychological and social functioning" (2013, 3), necessary for further functioning and intensification of the process of learning a profession in the workplace.

When conducting focused coding of collected data and creating the hierarchy of initial categories (determined on the basis of coding) that documented the entry process of novice teachers' into the professional group as well as analysing relationships within the professional group (Charmaz, 2009) in relation to a sense of agency of the interviewees, I identified the following three types of anchoring.

Among the studied teachers three different types of anchoring were possible to identify: anchoring through imitation, anchoring in family obligations and professional position and anchoring through a high self-assessment of the starting capital at the beginning of a career (Kędzierska, 2015).

Anchoring through imitation occurs through a simple adaptation to the culture of the professional group. The support point for the newcomer is then "the wisdom of a teacher staffroom". The novice finds his place in the teacher group by imitating the behaviours, situational definitions, principles and norms preferred by the members of the professional group that are identified in the

course of many everyday interactions. This is illustrated by the following comment:

> *I at the beginning watched what others were doing and tried to do as they did. When I had a problem I asked the supervisor of my internship and she explained to me precisely what should be done* (T/F:2)

The second type of anchoring is associated with the phenomenon that can be perceived as anchoring in family obligations and professional position. For novices from teachers' families, professional socialization and the process of entering into the teaching profession began largely during primary socialization, whereas entering into the teacher role was accompanied with opportunities to relate to professional experiences of the socializing environment. The following excerpt from the interview illustrates this point:

> *I became a teacher because my mother was a teacher and here really I can't make anything up, she persuaded me and I learnt from her more than during my studies* (T/F:6)

The third type of anchoring is related to (self)evaluation of the starting capital at the beginning of one's career. The support point for a novice teacher is one's conviction of one's high personal professional competencies and the desire to fulfil the already formed image of oneself in a professional role, as can be seen in the following fragment:

> *The first experiences at work were really difficult, because I experienced most of all the lack of interest and kindness on the part of older teachers but with my enthusiasm for work and all the ideas that were born in my head although it was difficult I knew that I would cope* (T/M:11).

As the analysis of teachers' threshold experiences indicates, the transition process occurred in dissimilar organizational cultures. Based on the excerpts devoted to organizational cultures of institutions in which the study participants were/are employed, it is actually difficult to determine transparent typologies. However, referring to the classification of organizational cultures formulated by Ch. Handy (1985), it can be concluded that the participants' professional socialization during the threshold period occurred in cultures dominated by role culture and power culture, though the intensity of features characteristic for particular types of culture was different in various schools.

In cultures characterized by a lack of cooperation, a temporary identity is imposed on the novice who enters the workplace. Narratives of the newly employed teachers demonstrate a certain pattern: the more the members of a given organization present competitive attitudes towards each other, and their activities are not focused on cooperation, the more often the novice is labelled as the Other.

The Other is a person who does not belong to a particular group, circle of people and their affairs; it is someone who comes from the culturally alien and

unfamiliar Otherness; someone who has not been yet clearly determined by us. Otherness is perceived negatively and the Other should be kept at a distance or ignored. One of the participants describes this experience as follows:

> *I did not mind what was happening there (staffroom; mine addition – H.K.) I entered so much as it was needed, to leave my things, school register and went on, for a long time I didn't know the names and now I still don't know all of them* (T/F/3)

Transformation of the Other's identity, as is indicated by the experiences of the participants, usually occurs through imitation and following approved institutional normative patterns.

Migrant identity pattern is a particularly interesting pattern that emerges from the experiences of teachers whose careers are of a patchwork nature. Because of the impossibility to be employed in a full-time mode in one institution, teachers who combine employment in a few schools or work part-time find it difficult to determine their points of reference so that they could transform their identities imposed by the group. A pejorative overtone of the term "migrant" that appears in the interviews indicates that migration in the teaching profession, although more frequent presently, is not perceived as "normal" and looking for a "domesticated school" and "attachment" to such a school remain standard attitudes.

In cultures in which cooperation exists (even in a limited form) or when a newcomer quickly finds a reference group during the threshold period, he is treated as a novice/disciple who, when beginning his work, learns the organizational and functioning principles and actively participates in the fulfilment of the aims sought for by the organization, while receiving support from other group members. This is depicted in the following fragment:

> *I was lucky because together with me in the same year some other teachers got employed for one year and we quickly got to know each other and also after school because this group liked cycling and this brought us closer to each other and I didn't feel that I had nobody to talk to, to ask* (T/M:1)

Professional socialization patterns at the threshold of one's career that emerged from the analysis indicate an extremely important dimension in becoming a teacher, i.e., learning a profession in the workplace. In other words, the course of novice teachers' professional socialization does not depend only on their academic preparation, but also on the type of organizational culture in which it will occur.

Conclusions

Exploration concerning the process of professional socialization of novice teachers in the transition period generates more questions than answers and,

understandably, does not allow me to formulate definitive conclusions thus far and theoretical generalizations with respect to the identified categories. I believe, however, that the obtained results facilitate some observations and suggestions.

Transition between the world of academia and the world of the teaching workplace generates the same problems that affect graduates in nearly all fields of studies. Transition difficulties indicated by Piróg (2016) such as: disturbed balance between demand and supply on the job market, temporality, patchwork professional careers, delayed transitions merit the close attention of both politicians and economists; yet, with respect to the teaching profession in-depth investigations are additionally necessary on the part of researchers in the field of education. Transitions, as many researchers highlight (Ecclestone, 2009; Czubak-Koch et al., 2017), are transformations on the level of one's professional identity and relate to a particular individual's sense of agency that occur as the result of various institutional contexts and learning environments.

Transition patterns documented in this study – successful, sensitive and uncertain – do not exhaust the 'catalogue' of possible career paths of novice teachers. They do, however, uncover risk areas inscribed into individual experiences of unsuccessful or uncertain transitions and unveil institutional mechanisms of the transition between the culture of academia and the workplace culture.

The analysis of novice teachers' anchoring strategies at the workplace in various organizational cultures proves that the legitimization of novices' peripheral participation in communal practices can be perceived not only as a process of learning in the community (Wenger, 1998), but also as an expression of power relationships. Organization cultures may block the process of learning a profession and novices' sense of agency; they may not be open to all non-members of a particular community and thus impede the process of successful transition. Hence support for students/graduates in the transition period between the culture of academia and the workplace culture should become a priority for higher education institutions teaching current and future generations of teachers.

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MEDICĪNAS KOLEDŽAS STUDENTU MOTIVĀCIJAS SEKMĒŠANA PROFESIONĀLO KOMPETENČU ATTĪSTĪBĀ

Medical Students' Motivation Promotion of Professional Competence Development

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Abstract. *When choosing the direction of education, it is important for a person or with the help of the given education he will be able to achieve the goals and ideals of his life, and realize his personality potential. The choice of a career, according to personality, determines success and successful professional performance. Medicine is an area that offers a wide range of opportunities to acquire a profession in various specializations. A successful study program for medical students is very closely related to motivation.*
Motivation is especially important in encouraging students to motivate the person to develop the chosen profession.
Motivation involves mutual interconnection of beliefs, perceptions, values and interests. In the pedagogical process, this means that the need is the main motive for learning, so it is important to notice that one level of needs encourages learning. The main task of the study process is to develop students' knowledge and skills that are useful in further professional careers.
Aim of the article: To study the motivation of students of medical college, the factors influencing it, which promote the development of professional competences.
Methods: quantitative study method, research instrument-survey.
Main results of the study on the factors of professional competence in the study process: competence of teachers (43 %), content of the study program (21 %), practical classes (24 %).
Keywords: *motivation, motives, medical students, study process in college, professional competences.*

Ievads
Introduction

Latvijai, atrodoties Eiropas Savienībā, aizvien būtiskāku vietu ieņem starptautiski izvirzītas prasības un standarti, kas reglamentē līdzvērtīgu medicīnisko pakalpojumu kvalitāti un prasības veselības aprūpē nodarbināto

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speciālistu profesionālo kvalifikāciju un tādejādi rodas nepieciešamība pēc labi sagatavotie speciālistiem, kas prot konkurēt un tai pašā reizē iekļauties darba tirgū.

Medicīnas jomas profesionāļu izglītība un viņu augstā profesionālā kompetence nodrošina labākus rezultātus pacientu aprūpē (slimību profilaksē, diagnostikā, ārstēšanā) (Bennett & Bennett, 2000).

Izvēloties izglītības virzienu, cilvēkam ir svarīgi vai ar konkrētās izglītības palīdzību viņš spēs sasniegt savas dzīves mērķus un ideālus, kā arī realizēt savu personības potenciālu. Profesijas izvēle, atbilstoši personībai, nosaka panākumus un veiksmīgu profesionālās darbības rezultātu. Medicīna ir tā joma kura sniedz plašas iespējas apgūt profesiju dažādās specializācijās. Sekmīga studiju programmas apguve ikvienam studentam ir ļoti cieši saistīta ar motivāciju. Profesionālo kompetenču apguve un pilnveide neapšaubāmi saistīta ar mācīšanās motivāciju. Latvijā ir piecas medicīnas koledžas, kas piedāvā līdzīgas studiju programmas māszinībās un ārsta palīgus, savukārt LU P. Stradiņa medicīnas koledža ir vienīgā, kura realizē profesionālās programmas kuras ir saistītas ar medicīnas tehnoloģiju apguvi radiologa asistenti, biomedicīnas laboranti un podologi. Pirmā līmeņa profesionālās augstākās izglītības studiju programmas ir izveidotas saskaņā ar Augstskolu likumu, MK noteikumiem „Noteikumi par valsts pirmā līmeņa profesionālās augstākās izglītības standartu" Nr. 141, 20.03.2001, profesijas standartu attiecīgajai profesijai un Latvijas Universitātes P. Stradiņa medicīnas koledžas iekšējiem normatīviem aktiem. Programmu apguves rezultātā studentiem jāapgūst kompetences, kas noteiktas profesijas standartos. Nodrošinājums ar medicīnas aprūpes speciālistiem (medicīnas māsām, ārstu palīgiem, radiologa asistentiem, biomedicīnas laborantiem, podologiem) Latvijā vēl joprojām ir nepietiekams, par to liecina Ārstniecības personu reģistra dati.

Veicot ikgadējo datu analīzi, nākas secināt, ka pirmā semestra laikā ievērojami samazinās studējošo skaits- 1/4 daļa studējošo neturpina uzsāktās studija izvēlētajā studiju programmā (PSK, 2017).

Tas autorēm liek meklēt atbildes uz jautājumiem – vai studenti ir motivēti mācīties, kādi faktori mazina motivāciju mācīties, kā tas ietekmē profesionālo kompetenču attīstību. Lai tos atbildētu tika studēta teorētiskā literatūra par mācīšanās motivāciju tās ietekmējošajiem faktoriem un nepieciešamajām profesionālajām kompetencēm kā arī to savstarpējo mijiedarbību.

Raksta mērķis: izpētīt medicīnas koledžas studentu mācīšanās motivāciju, to ietekmējošos faktorus, kas veicina profesionālo kompetenču attīstību.

Pētījuma metodoloģija – teorētiskās literatūras analīze, anketēšana.

Tika veikts pētījums, kurā piedalījās medicīnas tehnoloģijas pirmā kursa studenti, radiologa asistenti, biomedicīnas laboranti un podologi.

Profesionālo kompetenču attīstība medicīnas studentiem
Development of professional competences for medical students

Medicīnas koledžas studentu izglītības mērķis orientēts uz kvalifikāciju, konkrētām prasmēm, profesionālo kompetenci, studentu izaugsmi, gatavību un spēju apgūt jaunas zināšanas, prasmes un attieksmes, kas ir nepieciešamas pilnvērtīgai profesionālai dzīvei un personības pilnveidei. Autore D. Blūma akcentē, ka 21. gadsimtam ir nepieciešamas izglītības programmas, kas ir balstītas uz integrētu, starpdisciplināru un problēmorientētu pieeju. Integrēta pieeja balstīta uz sasaisti starp vairākiem mācību priekšmetiem vai studiju kursiem, starpdisciplināra pieeja balstīta uz to, ka pedagogs spēj sasaistīt teorētisko pieredzi ar praktisko, un spēj izskaidrot to pielietojamību dzīvē. Savukārt problēmorientēta pieeja balstīta uz spēju saskatīt un risināt problēmas. Autore uzskata, ka tādas izglītības programmas ir ļoti nepieciešamas mūsdienām, jo tās apvieno dzīvošanas prasmes un karjeras attīstību, izmantojot profesionālos un akadēmiskos priekšmetus, inovāciju, tehnoloģiju prasmes un domāšanas prasmes (Blūma, 2012).

Balstoties uz profesionālās kompetences jēdziena teorētisko pamatojumu, studentu – topošo speciālistu profesionālās kompetences attīstībā jāņem vērā:

- profesijas standartā noteiktās zināšanās un prasmes atbilstoši specialitātei;
- kompetenču saturs un apjoms, kas norāda uz gatavību dzīves darbībai attiecīgajā specialitātē;
- pienākumu un atbildības loks konkrētās profesionālās darbības sfērā;
- jautājumu loks, kurā speciālistam ir jābūt padziļinātām un daudzpusīgām zināšanām, iemaņām, prasmēm, pieredzei un attieksmēm, kuru kopums atspoguļo speciālista sociāli profesionālo statusu un profesionālo kvalifikāciju;
- speciālista personības individuālās spējas un īpašības, vērtības, kuras nodrošina iespēju realizēt konkrēto profesionālo darbību.

Lai noteiktu studenta – topošā speciālista kompetences līmeni, jānosaka viņa praktiskās lietpratības līmenis, profesionālā gatavība un atbilstība izvēlētajai specialitātei. Tādēļ, medicīnas tehnoloģiju katedras docētāji studiju procesā ciešā sadarbībā ar studentiem attīsta un motivē: studenta personība vispārējo virzību, speciālistam nepieciešamās profesionālās vērtības un profesionālās kompetences, sociālās kompetences, intelektuālās, inovatīvās (radošās) kompetences, vērtību kompetences un praktiskās kompetences.

Mācīšanās motivācija ir arī viens no rādītājiem, kas nosaka mācīšanās mērķus un uzdevumus. Motivācija ir sevišķi nozīmīga lai studentos rosinātu

personības motivāciju attīstību izvēlētajai profesijai. Motivācija attiecas uz "iemesliem, kuru pamatā ir uzvedība" (Guay, u.c., 2010).

Autori Gredlers, Broussards un Garrisons (2004), vispārīgi definē motivāciju kā "vajadzību", kas liek mums darīt vai nedarīt kaut ko. Tādejādi motivācija ietver pārliecību, uztveres, vērtību un interešu savstarpējo mijiedarbību. Pedagoģiskajā procesā tas nozīmē, ka vajadzība ir galvenais mācīšanās motīvs (Broussard & Garrison, 2004), tātad svarīgi ir pamanīt, kāds vajadzību līmenis pamudina mācīties. Galvenais uzdevums studiju procesā ir studentiem attīstīt nepieciešamās zināšanas un prasmes profesionālas darbības īstenošanai.

Mācīšanās motivācija un to psiholoģiskie aspekti
Learning motivation and their psychological aspects

Veicot literatūras avotu izpēti, autores secināja, ka motivācijai ir vairākas definīcijas. Katrs autors to skaidro savādāk. A. Šteinberga motivāciju apraksta kā dinamisku, psihisku cilvēka darbību psiholoģiski un fizioloģiski regulējošu procesu, kas nosaka tās noturību, organizētību, aktivitāti un virzību (Šteinberga, 2013).

Autori Valērijs Praude un Jakovs Beļčikovs (2001) uzskata, ka "motivācija ir noteiktu motīvu komplekss, kas veicina cilvēku rīcību noteiktā virzienā". Savukārt "motivēšana ir stimulēšana izvēlēties kādu no rīcības alternatīvām, lai sasniegtu personīgos mērķus" (Praude & Beļčikovs, 2001). Autors Viesturs Reņģe uzskata, ka ar vārdu "motivācija" tiek apzīmēti cilvēka iekšējie psihiskie spēki, kas mudina viņu darboties (Reņģe, 2004). Balstoties uz autoru atziņām, autores secina, ka motivācija ir motīvu kopums, kas rosina un pamato cilvēka darbību, rīcību, uzvedību, attieksmi, vajadzības un intereses, kuras ir cieši saistītas. Motivācija veidojās dažādu motīvu ietekmē, kuri ir pakārtoti personības identitātei.

Literatūrā sastopamas dažādas motivācijas būtību raksturojošas atziņas. Piemēram, autore Raščevska (Raščevska, 1999) atzīmē T. Mitčela motivācijas definīcijas četrus kopīgos raksturojumus:

- Motivācija ir tipizēta un individualizēta parādība, tā atspoguļo gan individuālo savdabīgumu, gan dod iespēju saglabāt vienreizīgumu.
- Motivācija ir daudzšķautņainā parādība. Divas galvenās šķautnes ir- aktivitātes izraisīšana un piesaiste vēlamajai uzvedībai.
- Motivācija ir tīša, pārdomāta darbība, tā ir saistīta ar cilvēka darbības kontroli.
- Motivāciju teorijas mērķis ir zināšanas, par to, kas cilvēku uz to pamudina, vispirms jāmin un jāapskata jēdzieni, kas raksturo cilvēku, viņa spējas, vajadzības, intereses un mācīšanās motivācijās iespējas.

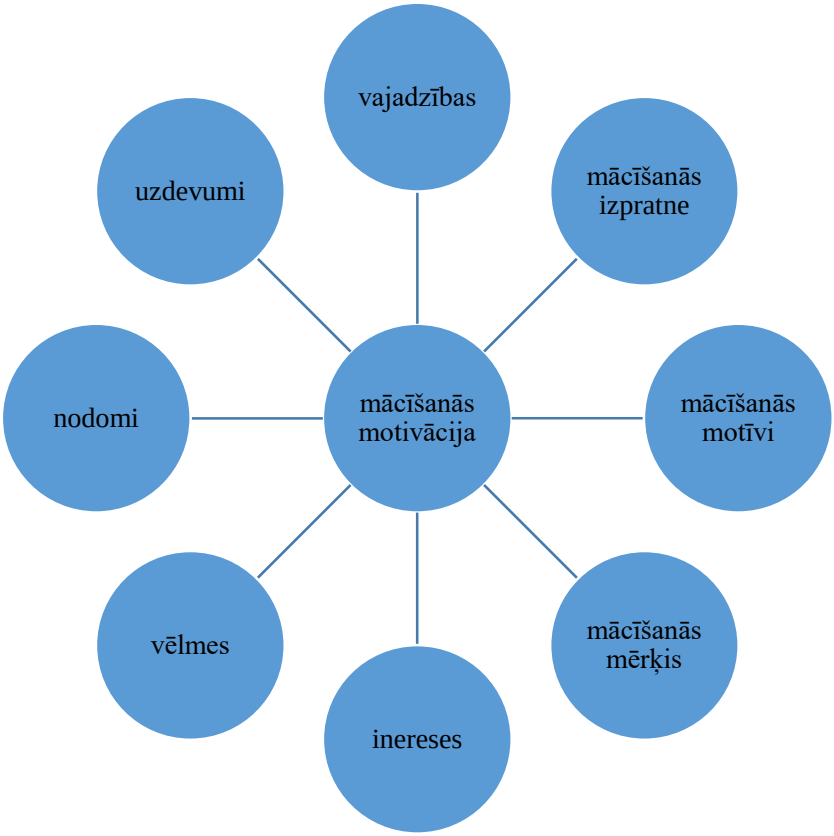
Tādejādi tiek apskatīts jēdziens personība. Autors V. Reņģe par personības jēdzienu runā vispārināti: personība ir neatkārtojams cilvēku īpatnību kopums; katra personība ir unikāla, tas ir vienots veselums, kas vada psihiskos procesus, nosaka cilvēka rīcību un izturēšanos (Reņģe, 2004).

Pols Mučinskis (*Paul Muchinsky*) motivācijas teorijas iedalījis trīs kategorijās:

- vajadzību teorijas – pieņēmums, ka cilvēkus motivē iekšēji stimuli;
- ekspektāciju un mērķa izvirzīšanas teorijas – pieņēmums, ka cilvēki darbojas racionāli;
- taisnīguma teorijas – pieņēmums, ka cilvēkus motivē ārējie faktori (Muchincky, 2000).

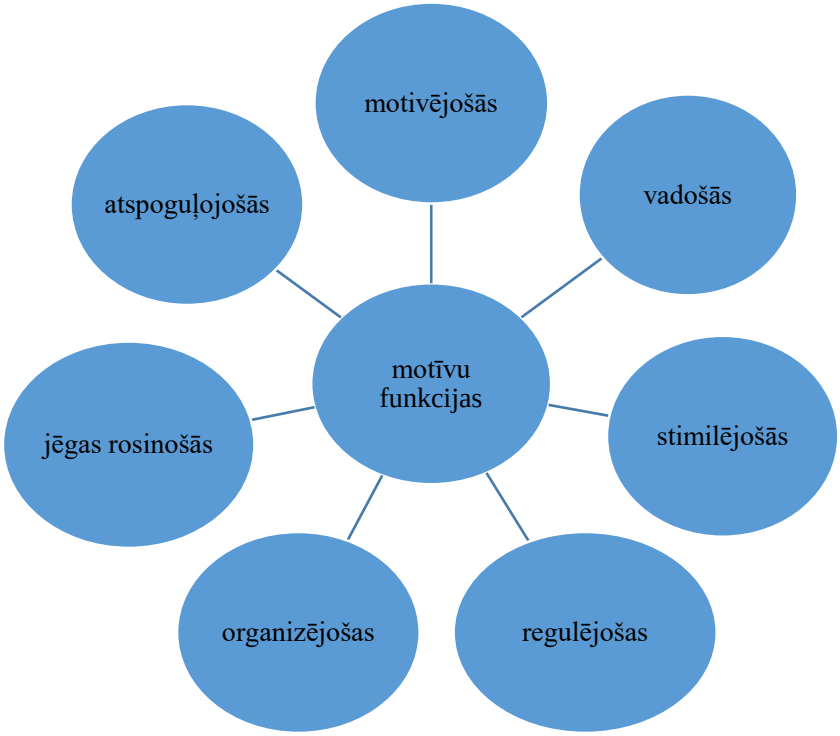
Tādejādi var secināt, ka noteicošais studentu motivācijā ir iekšējie stimuliem, racionālai domāšanai un ārējiem ietekmējošajiem faktoriem.

Balstoties uz vairāku autoru atziņām, autores secina, ka mācīšanās motivācijas struktūru veido vairāki komponenti: mācīšanas izpratne, mācīšanās motīvi, mācīšanās mērķis, intereses, gribasspēks, nodomi, uzdevumi un vajadzības, kura ir shematiski attēlota shēmā Nr. 1.



1.att. **Mācīšanās motivācijas struktūra** (autoru izstrādāts, pēc Broussard & Garrison, 2004)
Fig.1. ***Structure of learning motivation***

Motivācija ir motīvu kopums, kas saistīts ar konkrētu darbību un rodas vajadzības, mijiedarbojoties ārējiem un iekšējiem rosinātājiem (Baltušīte, 2006). Motīva attīstība noris caur pakāpenisku darbības loku paplašināšanu, tai ir sarežģīta funkcionāla struktūra, kura shematiski attēlota 2. attēlā.



2.att. **Motīvu funkcionālā struktūra** (autoru izveidots pēc Praude & Beļčikovs, 2001; Reņģe, 2004; Baltušīte, 2006)
Fig.2. ***The functional structure of the themes***

Motīvu funkcionālā struktūrā ir balstīta uz savstarpēju vairāku funkciju mijiedarbību: motivējošo funkciju, kas atspoguļo motīvu uzdevumu, cilvēka mērķtiecību mērķa sasniegšanā, vadošo funkciju, kas raksturo vadošos motīvus cilvēka personībā, stimulējošo funkciju, kas saistīta ar pastiprinātu cilvēka mērķtiecību mērķa sasniegšanai.

Aktīvā studiju procesā motivācijas sistēma sastāv no divu tipu motīviem: iekšējais un ārējais motīvs (Felzers, 2006), kuri atspoguļojas studentu personībā.

Iekšējā motivācija ir raksturīga stipriem studentiem, kuri cenšas apgūt izvēlēto profesiju atbilstošā zināšanu un profesionālo kompetenču līmenī. Iekšēji motivēti studenti dod priekšroku interesantākiem (grūtākiem) darba uzdevumiem, jo tādējādi tiek izprasts process, rasti jauni risinājumi. Ārēji motivēti studenti parasti izvēlas vieglākos darba uzdevumus, un dara tikai tik, cik nepieciešams, lai sasniegtu definēto rezultātu. Ārējās motivācijas rezultātā cilvēks galvenokārt ir orientēts uz rezultātu, kas samazina perspektīvas profesionālajai izaugsmei.

Tab.1. **Iekšējie un ārējie motīvi motivācijas sistēmā studiju procesā**
(autoru izveidots pēc Felzers, 2006; Baltušīte, 2006; Blūma, 2012)
Table 1 ***Internal and external motives in the system of motivation in the study process***

Motīvi	
Ārējie	**Iekšējie**
Draudi un iespējamais sods par nepietiekošām zināšanām	Interese par mācībām un zināšanu apguvi, pašapziņas celšana
Sagaidāmais pozitīvais vērtējums studiju procesā	Attieksme pret zināšanām, pašvērtējums, cel savu pašapziņu
Psiholoģiskais konflikts, konkurences studējošo vidē	Pilnveidot profesionālās zināšanas gan teorētiski, gan praktiski
Cenšanās izvairīties no negatīva pasniedzēja vērtējuma	Mērķtiecīga profesionālo kompetenču un zināšanu augstākā līmeņa sasniegšana
Materiālā un sociālā stāvokļa uzlabošanas iespējas	Jaunas informācijas apgūšanas nepieciešamība
Vājie motīvi	Stiprie motīvi

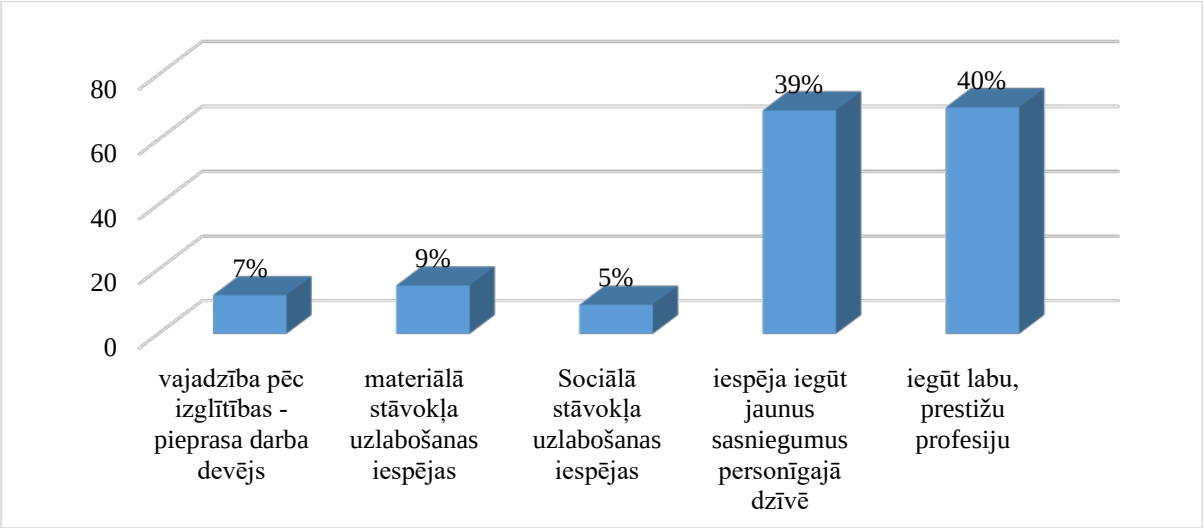
Rezultāti
Results

Medicīnas speciālista profesionālās darbības jomā būtisku lomu nosaka profesionālās kompetences, kuras balstās uz sistemātisku zināšanu un prasmju apguvi. Tādejādi ja netiek veikta atbilstoša studējošā motivēšana studiju procesam ir zema produktivitāte zināšanu un profesionālo kompetenču apguvē.

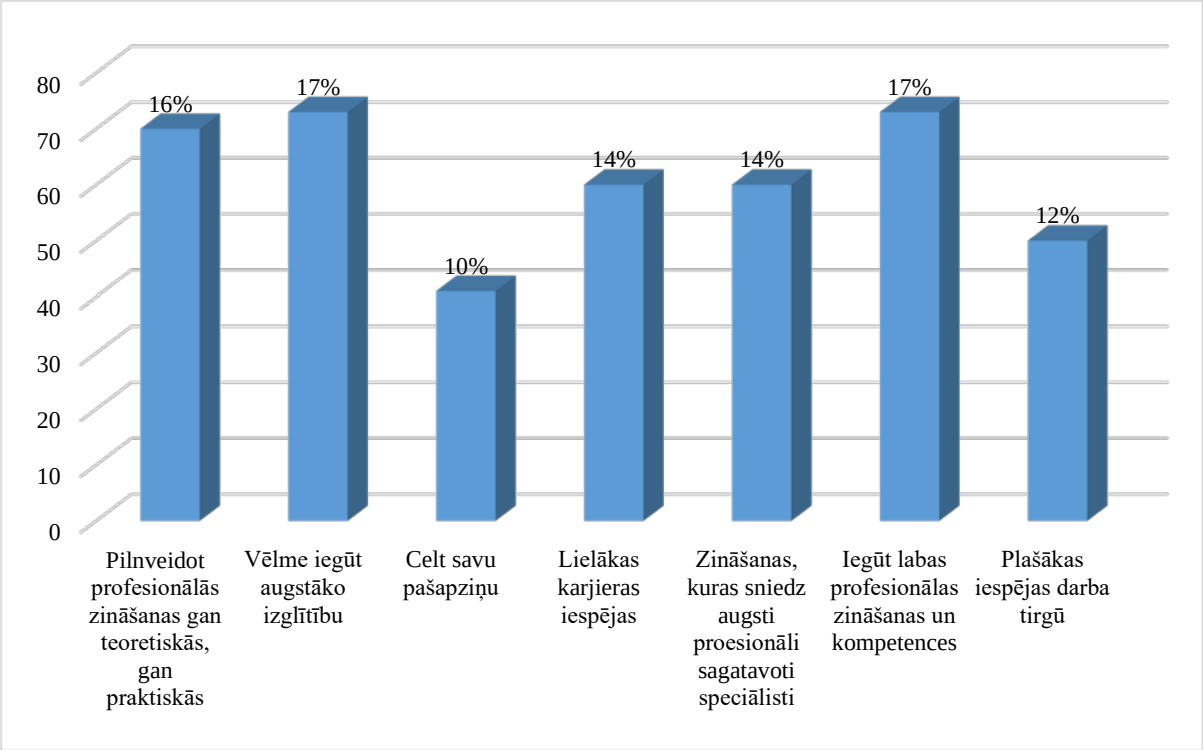
Motivāciju teorijas ir vērstas uz nepieciešamajām vajadzībām, kuras ir nepieciešamas studiju procesa īstenošanā. Svarīgi ir izzināt galvenos motīvus gan veicinošos, gan kavējošos, lai būtu iespējams motivēt studentus labākai profesionālo kompetenču apguvei.

Pētījumā tika izmantota kvantitatīvā pētniecības metode – aptauja Kā pētījuma instruments anketa, ar kuras starpniecību tika noskaidroti motīvi, kuri kavē vai stimulē medicīnas koledžas studentu motivāciju studiju procesam. Aptaujā piedalījās 73 pirmā kursa medicīnas tehnoloģijas studējošie.

Jautājumā – Ka*s ietekmēja Jūsu izvēli studēt?*, 40 % studējošie atzīmēja, ka viens no galvenajiem izvēles kritērijiem studēt izvēlētajā profesijā ir iegūt labu prestižu profesiju, savukārt 39 % uzskata, ka ar izglītību ir iespējams iegūt jaunus sasniegumus personīgajā dzīvē, kas sasaistās ar sociālo kompetenču attīstību profesionālajā pilnveidē un ir svarīgs aspekts medicīnas speciālistam praktiskajā darbībā.



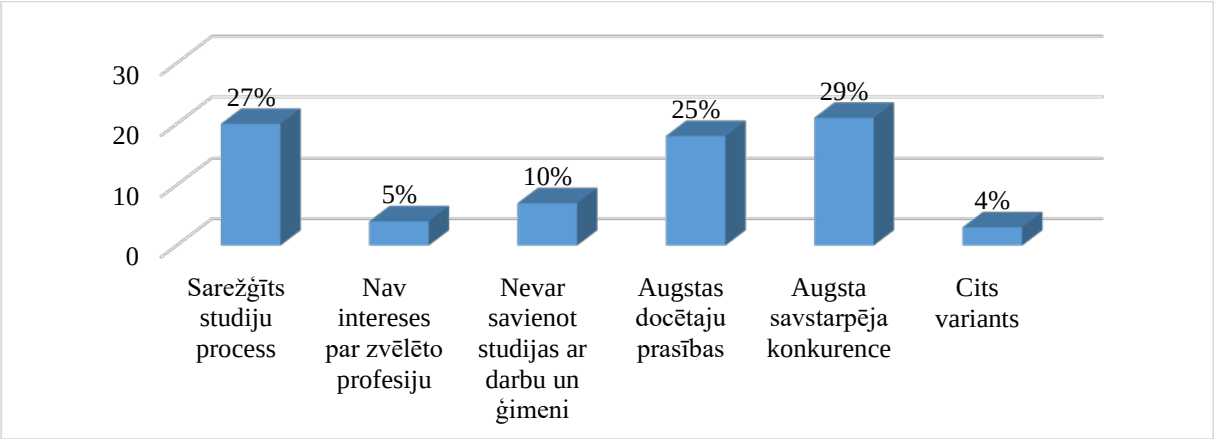
3.att. **Studiju izvēli ietekmējošie faktori**
Fig.3. ***Factors influencing the choice of study***



4.att. **Studiju izvēli ietekmējošie motīvi**
Fig.4. ***The motives influencing the choice of study***

Analizējot, studentu ietekmējošos motīvus uzsākot studijas secināms, ka nozīmīga ir visu motīvu kopa, gan vēlmei iegūt izglītību, apgūt profesionālās zināšanas un kompetences, kuras ceļ pašapziņu un tādejādi motivē labāku profesionālo kompetenču apguvi izvēlētajā profesijā. Plašas iespējas darba tirgū ir viens no vadošiem motīviem profesionālas karjeras attīstībā.

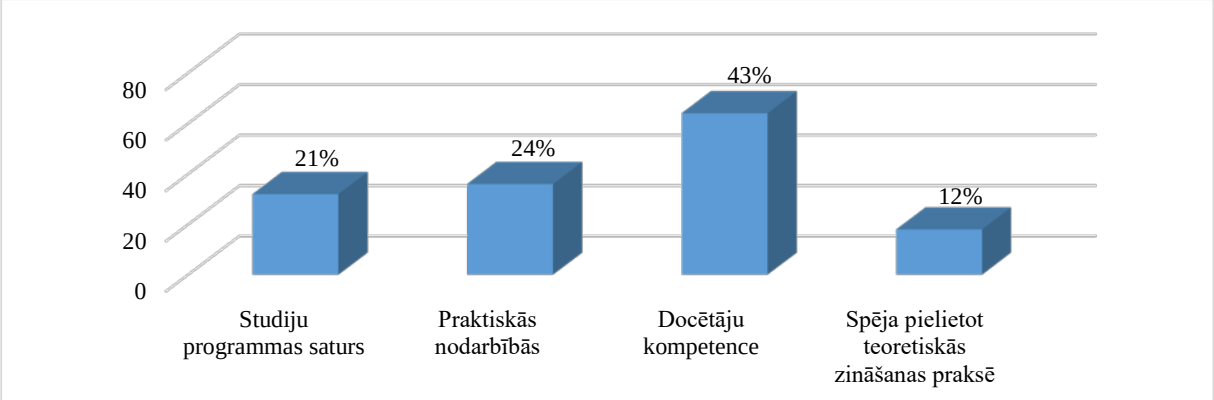
Autorēm svarīgi bija noskaidrot, kuri motīvi ir kavējošie studiju procesā, tādejādi tika uzdots sekojošais jautājums – *kuri motīvi, Jūsuprāt, ir kavējošie studiju procesā?*



5.att. **Studiju procesu kavējošie motīvi**
Fig.5. ***Study process hindering motives***

Kā būtiskus kavējošos motīvus studenti atzīmē 29 % augsta savstarpējā konkurence studiju procesā, 25 % augstas docētāju prasības un 27 % sarežģīts studiju process. Tas ir izskaidrojams ar to ka šobrīd straujas medicīnas tehnoloģiju attīstības laikmetā, ir nepieciešamība pēc augsti sagatavotiem speciālistiem, kuri ir motivēti un spējīgi iekļauties mainīgajos apstākļos. Diezgan mazs respondentu skaits norada, ka nav intereses par izvēlēto profesiju kas liecina par to, ka uzsākot studijas izvēlētajā profesijā studējošais ir motivēts tās tālākā apguvē, ko būtu jāņem vērā docētājiem organizējot studiju procesu. Kā vēl viens kavējošais faktors tika minēts grūtības savienot studijas ar darbu un ģimeni.

Savukārt, lai noskaidrotu veicinošos faktorus un motivāciju, kas veicina profesionālo kompetenču attīstību studentiem, tika uzdots jautājums par profesionālo kompetenci veicinošiem faktoriem.



6.att. **Profesionālo kompetenci veicinošie faktori**
Fig.6. ***Professional competence contributing factors***

Kā galvenos aspektus profesionālās kompetences veidošanā studiju procesā 43 % respondentu atzīmē docētāju kompetenci un 24 % respondentu praktiskās nodarbībās. Tas norāda ka profesionālās kompetences veidošanā būtiska loma ir praktizējošu docētāju pieredzei, kas nodrošina praktisko iemaņu apguvi izvēlētajā studiju programmā. Lai attīstītu spējas pielietot teorētiskās atziņas praksē, nozīmīga ir docētāju prasme motivēt studentu un integrēt teorētiskās zināšanās praksē, stimulējot interesi par izvēlēto profesiju.

Secinājumi
Conclusions

1. Pētījuma rezultāti atspoguļo veselu motīvu kopu, kurā dominē vēlme iegūt, gan augstāko izglītību, gan labas profesionālās zināšanas un kompetences, kas raksturo augstu motivāciju studējošajos izvēlētās profesijas apguvē, jo motivācija ietver sevī cieši saistītu uzskatu, uztveres, vērtību, intereses un darbības. Motivācija attiecas uz tiem iemesliem, kuru pamatā ir uzvedība, kuru raksturo vēlme un griba.
2. Kā norāda pētījumā iegūtie rezultāti, būtiska nozīme studentu motivācijas īstenošanai studiju procesā, attīstot profesionālās kompetences, ir praktizējošu docētāju pieredzei un studiju programmas saturam, kas motivē praktisko iemaņu apguvi, jo profesionālās kompetences veidošanos veicina studiju procesā apgūtās zināšanas un prasmes. Veidojot, attīstot un vērtējot medicīnas koledžas studentu profesionālo kompetenci, liela nozīme ir ne tikai zināšanām, iemaņām un prasmēm, bet studenta motivācijai, kur galvenokārt dominē interese par izvēlēto profesiju, karjeras iespējām un iekļaušanos darba tirgū.
3. Būtiska docētāja spēja ir apzināt vadošos motīvus, kā arī galvenos aspektus profesionālās kompetences veidošanā, tādejādi veicinot, medicīnas studentu motivāciju iegūt zināšanas, atklāt profesionālās prasmes, tās attīstīt un pareizi novērtēt. Medicīnas studentu attieksmei, motivācijai un vēlmei mācīties ir būtiska nozīme veiksmīga mācību procesa īstenošanā, patstāvīgas izglītības ieguves plānošanā visas savas dzīves laikā.

Summary

The purpose of the article “Promotion of the motivation of medical college in the development of professional competence” is to study the motivation of the students of the medical college and the influence of factors affecting it on the development of professional competences. A study was carried out, a student survey, which determined the students' view of the factors that affect and hinder the study process by acquiring professional competencies.

The study used a quantitative research method - survey As a tool for research tool, through which motives were found that impede or stimulate the motivation of the medical college

students for the study process. The survey was attended by 73 first-year medical technology students.

According to the results of the research, the factors influencing the choice of study are indicated: the prestige of the profession, personal growth, but the motives influencing the choice of study comprise a set of several motives: self-confidence, desire to obtain higher education, career opportunities. According to the results of the research, the importance of the student's motivation in the study process, developing professional competences, the experience of practicing lecturers and the content of the study program motivating the acquisition of practical skills, as the development of professional competence contributes to the acquisition of knowledge and skills acquired in the study process. In developing, developing and evaluating the professional competence of students of medical college, not only knowledge, skills and abilities are important, but the student's motivation, where the interest in the chosen profession, career opportunities and integration into the labor market is predominantly dominant.

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STEAM-ПРОЕКТЫ В ДИЗАЙНЕРСКОЙ ДЕЯТЕЛЬНОСТИ УЧЕНИКОВ И СТУДЕНТОВ

Steam-projects in the Design Activities of Pupils and Students

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Olena Shvets
Yuriy Babchuk
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Abstract. *The aim of the article is to reveal the essence of the new educational style called STEAM (Science, Technology, Engineering, Art, and Mathematics) which was born and now acquires rapid rates on the territory of the world leading countries. Based on the analysis of the main characteristics of STEAM-education and the results of its implementation in the Pedagogical University's teaching process, it has been stated that STEAM is a synthesis of such previously known teaching methods as contextual, problematic, project, integrated, heuristic education. It has also been shown that at the methodological level STEAM-education integrates such methodological approaches as system, personal, actionable, competence, integrative, technological, communicative, etc. It has been concluded that STEAM-education as being the genuine integration of sciences, technologies, engineering, arts and mathematics, is advisable to use in future teachers' training process as well as for organizing of project design activities of pupils and students in any branch of industry.*
Keywords**:** *STEAM-education, design activities, pedagogical design, knowledge integration, project education.*

Введение
Introduction

Дифференциация знаний, как одно из условий развития наук, породила проблему разделения общества на «гуманитариев» и «естественников». В результате этого на протяжении нескольких веков в обществе сформировались две субкультуры: гуманитарная и техническая - со своими понятиями, языками, ценностями. Быстрые темпы внедрения информационно-коммуникационных технологий ускорили и углубили непонимание между «гуманитариями» и «технарями».

Поэтому в обществе возникает угроза вырастить поколение «гуманитариев», которые не понимают не только условий

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функционирования технических устройств и механизмов, но и основных законов и принципов существования мира в целом. И, наоборот, новое поколение «технарей» может оказаться оторванным от основ социального бытия, не готовым к принятию других культур и религий, не способным к интеграции в мировое образовательное, экономическое и культурное пространство. Поэтому возникла настоятельная необходимость разработки такого способа обучения, который бы интегрировал научную и художественно-образную картины мира. Одним из способов интегрированного познания может быть дизайнерская деятельность учащихся и студентов.

На современном этапе развития цивилизации дизайн окончательно оформился как социокультурный феномен, который охватил все сферы человеческого существования (Dym et al., 2005). То влияние, которое осуществляет дизайн на развитие всех отраслей производства и культурной среды, и его функции в развитии общества (рационализаторская, организационная, созидательная, гуманизационная, социализирущая, экологическая, эстетическая), обусловливают необходимость постоянного обращения научной педагогической общественности к проблематике дизайна и осуществления дизайнерской деятельности в учебных целях.

За последние несколько десятков лет дизайнерская деятельность все чаще направлена на создание и преобразование не только материальных, но и виртуальных и чисто теоретических объектов. В мировой научной литературе появился термин педагогический дизайн, который означает: процесс анализа потребностей и целей обучения и разработку систем преподавания для удовлетворения этих потребностей (Gagne et al., 1992); деятельность по созданию и поддержке среды, в которой на основе наиболее рационального представления, взаимосвязи и совместимости различных типов образовательных ресурсов обеспечивается психологически комфортное и педагогически обоснованное развитие субъектов обучения (Bequett et al., 2012).

К дизайнерской деятельности в различных сферах на нынешнем этапе развития общества привлекаются не только взрослые, но и дети. Однако, несмотря на необходимость инновационных подходов в организации такой специфической и сложной межнаучной деятельности, как дизайнерская, в педагогике еще не выработан соответствующий оптимальный стиль подготовки учащихся и студентов к ее осуществлению.

Цель статьи – описать сущность нового стиля обучения (STEAM-образование), который зарождается и приобретает быстрых темпов распространения на территории ведущих стран мира, и который

целесообразно использовать в подготовке учащихся и студентов к проектной дизайнерской деятельности в любой отрасли.

Теоретические основы исследования
Research theoretical foundations

В эпоху политической и экономической нестабильности ведущие страны мира вновь обращаются к инновациям как способу обеспечить процветающее будущее своих государств. Как известно, инновации в любых отраслях человеческой деятельности тесно связаны с наукой, технологиями, инженерией и математикой. Первые буквы соответствующих слов на английском языке (Science, Technology, Engineering, Mathematics) определили название нового движения в образовательной сфере – STEM.

Научные знания – это результат изучения окружающего мира (живой и неживой природы, машин и механизмов, физических, психологических и социокультурных явлений) с использованием соответствующих научных теорий. Применение различных технологий все больше определяет эффективность производственных процессов во всех сферах человеческой жизни. Инженеры вместе с художниками и дизайнерами строят наши города и многое другое в нашей жизни. Математика есть во всем, что мы считаем, измеряем или иным образом количественно оцениваем. Владения системой знаний из перечисленных отраслей и умение их интегрировать обеспечивает специалисту успех в сложных профессиях, которые обычно высокооплачиваемые. Фактически STEM-образование представляет собой высокую степень интеграции знаний, а также предполагает интеграцию различных методологических подходов в организации образования (Lazarenko et al., 2017).

В современных педагогических исследованиях ученые убеждают в важности STEAM-образования, которое направлено на создание междисциплинарного и прикладного подхода к обучению различных предметов и обеспечивает успешное решение многих практических и реальных проблем. Ключевой является добавленная буква «А» – от английского «Arts», гуманитарные области знания, то есть STEM + Art = STEAM (Sousa et al., 2013).

Такой вид образования предполагает, что учащиеся не только будут решать проблемы, но и уметь их выявлять в реальном мире, выбирать соответствующие инструменты для их решения, разрабатывать план решения, а также оценивать правильность эффективность и оптимальность решения (Marginson et al., 2013), STEAM-образование в США признано эффективным на государственном уровне. Еще в 2013 году в Конгрессе

США представители этого направления в образовании выступили с критикой намерений правительства ликвидировать Национальный фонд гуманитарных наук, заявив, что только активация обоих полушарий мозга научит людей мыслить инновационно и креативно, что будет иметь решающее значение для роста экономики в XXI в. и создания рабочих мест. Во многих штатах сейчас функционируют школы математики, наук и искусств, академии искусств и науки (Фролов, 2010).

Методологические основы и методы исследования
Research methodological foundations and methods

Методологической основой исследования является системный анализ содержания и организации профессионального обучения будущих учителей на основе интеграции междисциплинарного, деятельностного и личностного подходов. В статье осуществлен анализ новейших педагогических публикаций с проблем повышения эффективности обучения и сути STEAM-образования, наблюдения за дизайнерской деятельностью учащихся, анкетирование студентов. Также осуществлялось оценивание практических дизайн-проектов студентов 4-го курса: 174 будущих учителей естественно-математических дисциплин и 182 будущих учителей гуманитарных дисциплин.

Результаты исследования
Research results

Поэтому до недавних пор было широко распространено убеждение, что для успеха в современной инновационной экономике человеку нужно получить STEM-образование (Marginson et al., 2013), что означает одновременное сочетание знаний из разных наук, современных технологий, достижений инженерии и математического инструментария. Во многих штатах в США признано, что STEM-образование помогает устроиться на одну из самых высокооплачиваемых профессий, и такие работники имеют значительный потенциал для профессиональной карьеры и играют ключевую роль в устойчивом росте экономики США (Фролов, 2010). Страны, в которых уже принятое STEM-образование: Китай, Канада, США, Австралия, Турция, Израиль. Ежегодно таких стран становится больше.

В Украине также признано преимущества STEM-образования. Так, например, в сентябре 2017 года отделом STEM-образования Института модернизации содержания образования в рамках Всеукраинского фестиваля «Ukraine STEM Festival - 2017» был проведён «Марафон STEM-

уроков», который охватил три тематических направления: «Как воспитывать исследователей и фантазёров»; «Идеи как вводить STEM-обучения на уроках в начальной школе»; «Реализация STEM-обучения на предметах естественно-математического цикла». Также проводятся многочисленные конференции и семинары с целью поиска, обнаружения эффективных подходов и технологических решений применения инновационных технологий STEM-обучения в аспекте развития способностей учащихся разного возраста.

Однако руководители крупнейших компаний мира обращают внимание на то, что одних знаний, как создать высокотехнологичный продукт, недостаточно. Необходимым и востребованным является умение понимать запросы и поведение потребителей, формировать общественное мнение, предвидеть возможные результаты и варианты развития событий. То есть, возникла потребность в интеграции STEM-образования с системой гуманитарных знаний, в том числе и с искусством. Поэтому в мировом сообществе педагогов стремительно распространяется новый термин благодаря усилиям его многочисленных сторонников, таких как Школа дизайна Род-Айленда (США), где разработаны школьные и университетские курсы нового STEAM-образования.

Практика указывает на то, что в художественных сферах уже нельзя обойтись без знаний по отдельным наукам и применения современных технологий. И наоборот, исследователи также обнаружили прочную связь между обучением в области искусств, изучением математических знаний и совершенствованием навыков наблюдения студентов в науке. Выявлено, что студенты, которые изучали искусство, смогли применить навыки наблюдения, которые они приобрели во время критического пересмотра картин, для наблюдения за научным экспериментом (Sousa et al., 2013).

Поэтому STEAM-образование широко применяют различные учреждения, корпорации и отдельные лица. Целями движения STEAM являются: превратить политику исследований на Art + Design в центре STEM; поощрять интеграцию Art + Design в образовании; воздействовать на работодателей, чтобы нанять художников и дизайнеров для стимулирования инноваций в экономике (Sousa et al., 2013).

Навыки, которые формируются с помощью STEAM, являются крайне необходимыми для современного и будущего рынка труда. Сейчас трудно предсказать, какие профессии будут наиболее востребованными, от чего будет зависеть карьера будущего специалиста, но критическое мышление, способность интегрировать знания из различных наук, креативно подходить к решению задач с использованием современных технологий будут востребованы всегда и в любой сфере человеческой деятельности.

Многие сторонники STEAM считают, что включение искусств в учебную программу STEM повышает степень привлекательности различных предметных областей и поддерживает развитие творческого мышления студента. Так, например, высшая школа Hauser Junior (Риверсайд, Иллинойс), предлагает классы STEAM, что сосредоточены на деятельности, связанной с проектированием инженерных технологий, методом решения проблем, в котором искусство и творчество играют ведущую роль.

Ученые склоняются к мнению, что искусство + Дизайн способны превратить экономику в 21 веке так же, как наука и технология в прошлом веке. Поэтому STEAM-образование набирает всё больше обороты в ведущих странах мира (Bequette et al., 2012). Так, например, в США в штате Мэриленд в 2017 году STEAM-образование признано основой для законопроекта по формированию сбалансированного и более широкого образования в государственных школах. Предполагается, что учащиеся будут применять междисциплинарные подходы к решению проблем реального мира, а основным является предпринимательские методы и междисциплинарные способы деятельности. То есть STEAM-образование является междисциплинарным интегрированным стилем обучения, которое формирует критическое и дизайнерское мышление, умение работать в команде, воспитывает инициативность, формирует предпринимательские способности.

Очевидно, что такой стиль обучения как STEAM может оказаться достаточно эффективным при выполнении проектов в дизайнерской деятельности. Поэтому мы сочли целесообразным ознакомить студентов с особенностями STEAM-образования и продемонстрировать им на примере выполнения дизайнерского проекта, как происходит интеграция знаний с естественных, технических, гуманитарных наук, математики и искусств.

Метод проектов уже давно признан как технология обучения, совмещенного с практической деятельностью, направленной на выполнение конкретной задачи или решение некоторой проблемы из реальной жизни. С применением принципов STEAM-образования проектная деятельность, как показали наши наблюдения, приобретает новые черты и становится более реальной и более интересной.

Для примера мы выбрали изготовление макетов мебели (стол и стул). Начиная от творческого замысла, концепции до воплощения идеи в моделях из определенного материала (бумага, дерево, металл, пластик), студенты демонстрируют знания по целому комплексу дисциплин художественного и инженерного циклов: композиции, формообразования, компьютерной графики, проектирования, конструирования, материаловедения. Студенты используют основные законы композиции:

статика и динамика, ассоциативный ряд, пропорции золотого сечения. Сопоставление текстур и фактур в сочетании с пластикой форм позволили лучше воплотить художественно-эстетическую идею (рис.1).

Бионические и эргономичные стороны проекта позволяют говорить о его функциональности, а оптическая и физическая устойчивость, конструктивность изделий – об их прочности. Знание материалов и технологические методы их обработки, отделки дают возможность создать «легкость», «воздушность» и «текучесть» форм. Поэтому всегда актуальное для дизайнера выражение: «прочность, удобство и красота». Именно эти характеристики должны быть воплощены в каждом проекте.

Наши наблюдения показали, что знания по таким дисциплинам как стереометрия, механика позволяют не только развить пространственное воображение, но и интуитивное чувство равновесия, устойчивости проектируемого предмета, а также проверить это эмпирически. Дополнительным источником вдохновения в дизайнерской деятельности является бионика, поскольку имеет неисчерпаемый запас природных форм, линий, цветов и конструкций. Студенты должны научиться уметь позаимствовать у природы и использовать в своей разработке принципы соединений, конструктивные особенности, структурное построение, пластику, разделение на части, принципы трансформации и много других средств формирования объектов живой и неживой природы.

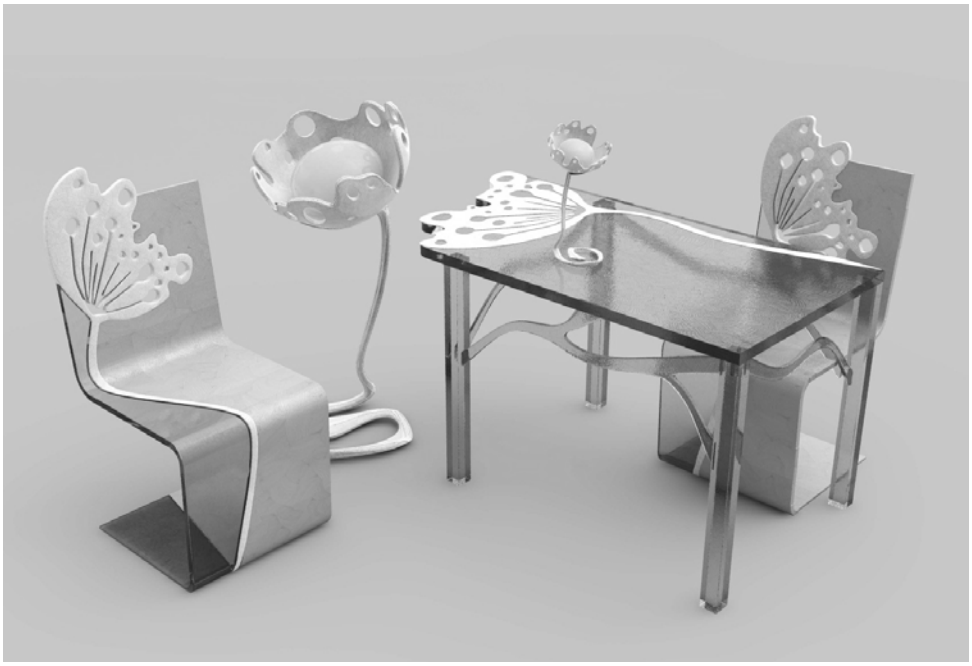

Рис.1. **Макет комплекта мебели (студенческий авторский проект)**
Fig. 1. ***Furniture set model (students' author project)***

Следующим шагом было объяснение того, что дизайнерскую деятельность можно и следует применять везде, где речь идет о создании нового материального продукта (одежда, продукты питания, мебель, игрушки), нового социального положения (построение карьеры, создание семьи, расширение бизнеса), нового интеллектуального, морального или физического качества личности (расширение мировоззрения, повышение интеллектуального потенциала, общекультурное развитие, воспитание характера, развитие стрессоустойчивости, улучшение состояния здоровья).

В помощь студентам предлагаем схему, включающую набор научных отраслей, технологий, средства инженерии, виды искусств, математические действия.

- S (Science) - научные отрасли (естественные и гуманитарные науки).
- T (Technology) - технологии (технологии изготовления и обработки материалов, химические технологии обработки и соединения веществ, информационно-коммуникационные технологии, технологии обучения, психологические технологии влияния).
- E (Engineering) - инженерия (технические устройства, инструменты, компьютерная техника, робототехника).
- A (Art) - искусство (музыка, живопись, архитектура, театр, кино, литература).
- M (Mathematics) - математика (измерения, масштабирование, определение пропорций и отношений и т.п.).

Для осуществления дизайнерской деятельности группам студентов (по 4 студента в каждой) было предложено выбрать любую сферу человеческой жизнедеятельности и попробовать создать STEAM-проект желаемого продукта в виде эскиза или модели с использованием научных знаний в соответствующих областях, современных технологий, инженерных правил и законов, математических расчетов и художественного оформления. Такими проектами были: макеты машин, зданий, мебели, одежды; описание рецепта и эскиз оформления блюд питания; эскизы ландшафтного дизайна и дизайна интерьера; картинки к оформлению детской литературы и тому подобное.

Интересной и познавательной оказалась разработка сценария интегрированной лекции на тему «Золотое сечение в нашей жизни» с использованием принципов STEAM-образования. Понятие «золотое сечение» является математическим (это разделение двух частей отрезка в отношении, которое примерно равно 1,62), но проявляется оно в разных науках, в различных сферах жизнедеятельности человека. В таком отношении делит человеческое тело линия талии; расстояние между

подбородком и носом – линия губ; длину руки до запястья–локтевой сустав. Аналогичные разделения наблюдаем в архитектуре зданий, в композициях картин, в строении растений. Следовательно, именно «золотая пропорция» является критерием гармонии и красоты, а это уже категория искусства и эстетики. То есть «золотое сечение» является наиболее удачным примером математической гармонии природы (Коломиец, 2007).

Фактически выполнение такого проекта уже есть осуществлением педагогического дизайна, над которым работала команда из 4 студентов. Один обрабатывал теоретический материал по проблемам STEAM-образования и педагогического дизайна; второй занимался поиском информации в Интернете относительно проявлений «золотого сечения» в различных научных областях; третий планировал этапы, содержание и структуру занятия с учетом основных принципов педагогического дизайна, рекомендованные американскими психологами (Gagne et al., 1992); четвертый осуществлял оформление материала для компьютерной презентации. Ограниченность во времени требовала от студентов четкой слаженности действий, выработки стратегии и плана, выбора материала и технологий в соответствии с целевой аудиторией, оформление внешнего вида отдельных видеофрагментов и их экспертной оценки, быстрого реагирования на критику других членов команды.

Сотрудничество четырех студентов дало значительный синергетический эффект. Каждым участником команды было усвоено, что:

- STEAM-образование имеет большие возможности для интеграции знаний из разных наук;
- педагогическая деятельность по планированию и структурированию занятия, определённая учеными как педагогический дизайн, имеет свои этапы и правила;
- основными принципами педагогического дизайна являются: пробуждение интереса к теме и методам обучения, формулировка ожидаемых результатов; соблюдение максимальной доступности материала, семантическое формирование установки на удержание учебного материала в долговременной памяти; проверка теоретического материала на практике; оценка эффективности занятия и успешности усвоения материала; планирование дальнейшего использования материала на практике;
- «золотое сечение» как математическое понятие имеет свои проявления в природе и искусстве;
- эффективным средством демонстрации проявления «золотого сечения» в различных сферах является компьютерная

презентация, содержание которой можно наполнять, учитывая целевую аудиторию (ученики, студенты-будущие педагоги, студенты-будущие дизайнеры).

В нашей практике, когда студенты работают на разных этапах процесса проектирования, чтобы создавать конкретные решения проблемы, они должны быстро выдвигать и анализировать идеи, в том числе и визуально с помощью чертежа. Позже они могут создавать физические прототипы в соответствующем масштабе с помощью бумаги, пластика, ткани и др., прежде чем переходить к изготовлению конкретного изделия. Студенты убеждаются, что иногда можно разработать сотни эскизов и прототипов, прежде чем определить лучший дизайн будущего продукта. А ускорить эти процессы можно благодаря интеграции научных знаний, современных технологий и специфических средств искусства. В процессе проектирования студенты учатся видеть связи между искусством, математикой и различными науками, учатся интегрировать знания из различных наук, воспитывают в себе настойчивость, коммуникабельность, целеустремленность, инновационность, способность работать в команде.

После ознакомления студентов с теоретическими основами STEAM-образования и выполнения STEAM-проектов им было предложено заполнить анкету с целью выяснения их отношения к такому новому стилю обучения. Мы отдельно опрашивали будущих учителей естественно-математических дисциплин и будущих учителей гуманитарных дисциплин. По результатам анкетирования было выяснено, что эффективность и целесообразность использования STEAM-образования в школах признают 83,4 % «естественников» и 75,6 % «гуманитариев». Оба эти числовые показатели дают основания надеяться, что и те, и другие будут использовать этот новый стиль обучения в своей будущей профессиональной деятельности.

Выводы
Conclusion

STEAM-проекты делают процесс получения образования более активным, содержательным, максимально приближенным к реальным условиям жизни и деятельности. Интегрируя искусство и дизайн с различными науками, студенты культивируют способность быть творческими и изобретательными в решении проблем, выдвигать различные идеи, распознавать неудачи как возможности для открытия. С помощью STEAM-проектов студенты учатся проектировать и создавать продукты эстетического и удобного для себя и других мира. В процессе STEAM-образования происходит одновременно гуманизация и

технологизация обучения; эффективнее усваивается учебный материал; создаются лучшие возможности для формирования личностно значимых компетенций; формируется способность к работе в команде.

Summary

STEAM-education is a synthesis of such previously known teaching methods as contextual, problematic, project, integrated, and heuristic. This statement is indicated by the following facts: increasing the level of problematic and integration of training contents; application of modern scientific achievements in relevant industries; the use of modern computer programs not only for information retrieval processes optimization, but also for making decisions; verification of the decisions' efficiency and optimality by means of mathematical methods; realization of creative projects using modern technologies as well as observance the principles of novelty, practicality and aesthetics, etc. At the methodological level STEAM-education integrates such methodological approaches as system, personal, actionable, competence, integrative, technological, communicative, etc. Due to the synthesis of these methodological approaches, the STEAM style in the teaching process gives a very strong synergetic effect, involving both emotional and intellectual spheres of the students' development.

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ОРГАНИЗАЦИОННО-ПЕДАГОГИЧЕСКИЕ УСЛОВИЯ ФОРМИРОВАНИЯ ПРОФЕССИОНАЛЬНОЙ КОМПЕТЕНТНОСТИ БУДУЩИХ ПЕДАГОГОВ

Organizational-Pedagogical Conditions of Forming Professional Competence in Future Pedagogues

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Abstract. *In the article is considering possibilities of realization of competence-based approach in process of training future pedagogues in a higher education institution. The author proves main ideas of educational strategy that provide with effectiveness of forming professional competence in pedagogues. The content of the article shows the importance of integration educational, scientific and pedagogic activity in the process of development of professional competence in future pedagogues. It describes principles, modes and methods of effective organization of professional competence in future pedagogues during process of education in a higher education institution.*
Keywords: *professional competence, humanitarian educational environment, innovations, educational technologies, formal, non-formal and informal education.*

Введение
Introduction

Актуальность проблемы, рассматриваемой в настоящей статье, обусловлена тем, что в XXI веке проблема формирования профессиональной компетентности приобрела особую актуальность. Это связано с тем, что происходящие в обществе социально-экономические и социокультурные изменения предъявляют новые жесткие требования к личности специалиста. На первый план выдвигается способность быть субъектом своего профессионального развития, самостоятельно находить решения социально и профессионально значимых проблем в условиях быстро меняющегося общества. Особая роль в этом процессе принадлежит вузовскому образованию.

Решение данной поставленной перед высшей школой задачи обуславливает выстраивание принципиально иной образовательной стратегии деятельности вузов, в основе, которой лежит логика овладения педагогом философскими, педагогическими, психологическими,

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методическими и т.д. знаниями.

Цель статьи заключается в осмыслении и обобщении многолетнего опыта работы в вузе и реализации компетентностного подхода посредством сочетания формального, неформального и информального образования, через «синхронный синтез» (Ю. М. Лотман). образовательной, научной и воспитательной деятельности.

Представленный в статье материал работы основан на обобщении профессиональной деятельности, в процессе которой осуществлялся: педагогический эксперимент, педагогическое наблюдение, анкетирование, тестирование, анализ результатов учебной деятельности студентов.

Базой исследования стал Ставропольский государственный университет, ныне переименованный в Северокавказский федеральный университет. Внедрение результатов осуществлялось Ленинградском в областном государственном университете им. А. С. Пушкина. В эксперименте принимали участие студенты, обучающиеся по направлению подготовки «Педагогическое образование».

Теоретическая основа темы
The theoretical background

Начальным этапом формирования профессиональной компетентности педагога является вуз. Вуз – прежде всего учреждение высшего образования, которое оказывает самые разнообразные услуги, связанные с подготовкой высококвалифицированных работников.

Подготовку педагогических кадров в системе высшего образования в России осуществляют как педагогические вузы (пединституты и образованные на их основе педагогические университеты), так и классические университеты, представляющие собой особый тип учебного и научного учреждения. Т. Парсонс в работе «Американские университеты и их место в обществе» определяет университеты как когнитивный комплекс, соединяющий знания, рациональность, учение, конкурентоспособность и интеллектуальность. Этот когнитивный комплекс выражает «наиболее важные черты развивающейся структуры современных обществ» и является «центральным институтом в обществе». (Parsons, Platt, 1973). Неслучайно университет рассматривается сегодня не только как образовательное учреждение, но и как научный и культурный центр.

В современной социокультурной ситуации главная задача российской образовательной политики определяется как обеспечение современного качества образования на основе сохранения его фундаментальности и соответствия актуальным перспективным потребностям личности, общества и государства (Коржуев, Попков 2002).

Такая трактовка главной задачи позволила сформулировать тенденции профессиональной подготовки будущего педагога в классическом университете. К ним относятся, прежде всего: стандартизация, непрерывность, фундаментализация, гуманизация.

Стандартизация профессионального образования представляет собой осознанное установление упорядоченных диагностических требований к образованию, позволяющих установить необходимый уровень квалификации специалиста; повысить качество подготовки; установить преемственную связь субъектов профессионального образования в условиях непрерывного образования.

Непрерывность вузовского образования – многомерное движение личности в образовательном пространстве. Непрерывность профессионального педагогического образования реализуется через единство целевых, содержательных процессуальных звеньев учебно-воспитательного процесса вуза, через учет специфической природы педагогического образования.

Фундаментальность образования – является одним из приоритетов современной образовательной парадигмы. «Фундаментальность высшего образования – это соединение научного знания и процесса образования, дающее понимание образованному человеку того факта, что все мы живем по законам природы и общества, которые никому не дано игнорировать» (Садовничий, 2003).

Фундаментализация профессионального образования обеспечивает условия для формирования социально защищенного, конкурентоспособного специалиста, способного к рефлексии личностного развития, оценке своей учебно-познавательной, учебно-исследовательской, а затем и профессиональной творческой деятельности.

Гуманистический характер образования – это создание максимально благоприятных условий для раскрытия и развития способностей и дарований будущего преподавателя, для его самоопределения. Это – учет психофизиологической самобытности личности, особенностей социального и культурного контекста жизни студента, сложности и неоднозначности его внутреннего мира. Это – ориентация вуза не только на подготовку студента к будущей профессии, но и обеспечение полноценности его сегодняшней жизни.

Свободное развитие личности будущего педагога возможно только при смене коренных образовательных установок, при уходе от «знаниевой» парадигмы образования к его «развивающей» парадигме, от адаптивной и репродуктивной его модели к деятельностной и преобразующей направленности профессионального образования.

Отказ от «знаниевой» парадигмы образования, в которой традиционно выстраивалась образовательная система, вовсе не означает отказа от

полноценного обретения знаний. Это означает, прежде всего, принципиальное изменение педагогических подходов: знание может быть полноценным только при включении механизмов развития личности. Знания, не нанизанные на стержень развития человека, на его способности добывать их самостоятельно, мертвы. В свою очередь человек, наполненный отмершими знаниями, не способен к развитию, к полноценной жизни, деятельности, перемене труда (Лаптев, Тряпицына, 2002).

Рассматривая главное предназначение образования в создании условий для социализации и развития личности человека, следует отметить, *что педагогическое образование*, кроме конструирования таких условий по существу само представляет собой систему *условий обеспечивающих развитие и профессиональное становление будущих специалистов* через овладение ими определенным содержание. Другими словами, речь идет о гармонизации гуманистического по своему характеру содержания педагогического образования как образования, реализующего гуманистическую идею (Козырев, 2005).

Теоретический анализ исследований и личный опыт показал, что образовательная практика будет более эффективной, если она строиться на принципах:

- личностной ориентации;
- профессиональной ответственности и требовательности;
- побудительной активности и творческой инициативы.

В нашем исследовании среди основных идей образовательной стратегии, обеспечивающей эффективность формирования профессиональной компетентности педагогов, мы выделяем:

- создание единой гуманитарной образовательной среды;
- инновационность;
- эффективные образовательные технологии.

Несмотря на то, что в этой логике присутствуют уже известные положения, мы разделяем мнение В. В. Лаптева и. А. П. Тряпициной о том, что «…используя чужой опыт можно перенять идеи, чтобы по-новому осмыслить собственный опыт, предложить свои варианты интересных эффективных…» (Лаптев, Тряпицына 2002) решений исследуемой проблемы.

В нашей работе гуманитарную образовательную среду непрерывного образовательного процесса мы рассматриваем как дискретно-интеграционную. Дискретность заключается в том, что каждый этап отличается своеобразием контингента учащихся, постановкой целей и задач, особенностями содержания, методического обеспечения и организационных форм. На каждом этапе непрерывного вузовского

образования функционирует образовательная среда, имеющая свою логику взаимодействия и функционирования элементов системы. Интегративность гуманитарной образовательной среды состоит в целостном согласовании ее элементов, во взаимосвязи и преемственности между бакалавриатом и магистратурой. Системообразующим фактором является цель – формирование профессиональной компетентности педагогов.

Существенным элементом развития образования в современной педагогической практике являются инновации. Они выражаются в тенденциях накопления и видоизменения разнообразных инициатив и нововведений в образовательный процесс. Всплеск инновационной деятельности в образовательных учреждениях системы непрерывного образования, основывается на принципах увеличения разнообразия и самоорганизации, что становится предметом синергентического управления и достаточно созвучно полифонии инноваций, характерных для современного российского образования.

В русле рассматриваемой нами проблемы формой инновационной деятельности становится проектирование, которое не сводимо ни к обновлению (восстановлению полноценного старого), ни к нововведению (внедрению некого новшества), а предполагает моделирование новых способов работы с самим образованием в сферах культурно-образовательной среды внутри образовательных учреждений с использованием эффективных образовательных технологий.

Педагогическая технология – это системный метод создания, применения и определения всего процесса преподавания и усвоения знаний с учетом технических и человеческих ресурсов и их взаимодействия, ставящий своей задачей оптимизацию форм образования (ЮНЕСКО) (Вершловский 2007).

Таким образом, разработка организационно-педагогических условий направленных на формирование профессиональной компетентности педагога в процессе вузовского образования, осуществилось нами на интегративной основе, с учетом особенностей каждого этапа вузовского образования, а также на основе дифференцированного подхода к обучающимся разных категорий и уровней подготовки, а также создания условий для построения индивидуальной образовательной траектории.

Организация исследования
Research organization

Профессиональную компетентность педагога мы рассматриваем как интеллектуально и личностно обусловленную социально значимую качественную характеристику специалиста, которая складывается из

глубокого досконального знания существа выполняемой работы, высокого уровня инициативы и творчества, способности достигать высокие результаты в обучении и воспитании школьников, готовности оценивать и анализировать социальные последствия своих действий. В структуре профессиональной компетентности мы выделяем такие компоненты как: *мотивационно - ценностный, интеллектуально - познавательный, действенно - практический и рефлексивно – оценочный*.

В процессе экспериментальной работы была предпринята попытка реализации организационно-педагогических условий, необходимых и достаточных для эффективного формирования и развития у будущих педагогов профессиональной компетентности на вузовском этапе непрерывного образования. В основу организации процесса формирования профессиональной компетентности педагога, легли деятельностный и системный подходы.

В эксперименте приняли участие студенты таких факультетов как: филологии и журналистики (учитель русского языка и литературы), физико-математического факультета (учитель физики или математики), медико-биолого-химического (учитель биологии или химии), факультета физической культуры (учитель физкультуры). Изменяемой составляющей в эксперименте была система форм и методов, а также введение спецкурсов психолого-педагогической и социокультурной направленности, обязательное вовлечение студентов экспериментальной группы в научно-исследовательскую и общественную деятельность.

Данная образовательная траектория позволяла гибко дифференцировать требования учебной деятельности студентов в той или иной предметной области:

- определять познавательную базу для разных видов деятельности;
- предоставлять студенту право выбора предметной области для изучения;
- строить индивидуальные образовательные маршруты формирования профессиональной компетентности
- установить многоплановую систему выявления личностных достижений обучающихся как результата обучения

Таким образом, образовательная траектория формирования профессиональной компетентности будущих педагогов проходил через базовые дисциплины социо-гуманитарного и психолого-педагогического блоков, сочетание формального (обязательные учебные занятия), неформального (исследовательская работа), информального (участи в педотряде, волонтерских мероприятиях).

Дисциплины социо-гуманитарного блока выполняя методологическую, мировоззренческую, общекультурную, гуманистическую функции создают научную базу для формирования профессионально-педагогической компетентности, формируя категориально-понятийный аппарат. Введение формирующей программы в различные дисциплины социогуманитарного блока такие как «Социальная философия», «Культурология», «Социология», давало возможность формировать понятийно-категориального аппарата, расширять и углублять знания о закономерностях развития общества, формирования структуры общества, становления общественных отношений и т.д.

В тоже время необходимо отметить, что в нашем исследовании речь идет о формировании профессиональной компетентности, педагога, следовательно, особое значение приобретают дисциплины психолого-педагогического блока. Дисциплина обозначенного блока концентрируют в себе методологические и теоретические вопросы организации учебно-воспитательного процесса в образовательном учреждении и направлена, прежде всего, на формирование у будущего педагога теоретической готовности к осуществлению социально-педагогической функции преподавателя. Современная образовательная парадигма и тенденции развития общего и профессионального образования указывают на необходимость направленности на педагогическую деятельность, на реализацию личностно-ориентированного образования, внедрение в учебный процесс современных технологий обучения и воспитания. Курсы по выбору, предлагаемые в психолого-педагогическом блоке, позволяют решить психолого-педагогические задач в мотивационно-ценностной, интеллектуально-познавательной, действенно-практической и рефлексивно-оценочной сферах.

В *мотивационно-ценностной сфере* курсы по выбору способствуют: осознанию готовности к постижению ценностей профессиональной деятельности педагога; осмыслению важности профессионального совершенствования в области профессиональной компетентности. В *интеллектуально-познавательной сфере* содержание курсов по выбору призвано: обеспечить понимание сущности процессов обучения и воспитания в современном обществе; сформировать знания о воспитательных системах прошлого и настоящего, В *действенно-практической сфере* содержание курсов направлено на формирование умений: проектировать, конструировать, организовывать педагогическую деятельность с учетом особенностей участников образовательного процесса; «педагогизировать» получаемую информацию; организовывать учебную и внеучебную деятельность учащихся, управлять ею и оценивать ее результаты. В *рефлексивно-оценочной сфере* курсы по выбору помогают: изменить представления о себе и своей работе в будущем; развить

стремление к самосовершенствованию.

Применение в образовательном процессе активных форм и методов («мозговой штурм», «ярмарка идей», дискуссии, анализ ситуаций и др.) побуждает к сотрудничеству, развивает интерес к психолого-педагогической тематике, способность конструктивно работать в команде, оценить себя и своих сокурсников, обеспечивает комплексное воздействие на развитие всех компонентов профессиональной компетентности. Подобные формы позволили учебные задания представить в виде открытой структуры, где предполагается воздействие на все параметры учебных ситуаций (информация, участники, характер взаимодействия, продукт творческой совместной деятельности).

Кроме того, в нашей работе использовалась так называемая «формула поведения», согласно которой осуществлялся анализ поведения студентов во время дискуссий на занятиях, при разборе различных ситуаций, а также анализировалось участие студентов в научно-исследовательской работе, творческих и проблемных группах, деятельность во время педагогической практики. «Формула поведения» позволила выявить профессионально значимые качества (коммуникативные, организаторские и др.). Результаты наблюдений фиксировались в личной карточке учета, а затем переносились в сводную ведомость. Кроме того оценка уровня сформированности профессиональной компетентности будущих педагогов осуществлялась на основе анализа успеваемости студентов, анализа тестовой диагностической карты, анализа тестов на конфликтность, коммуникативные способности и т.д.

Однако полноценно сформировать профессиональную педагогическую компетентность только на лекционных и семинарских занятиях невозможно. Поэтому инвариантная система формирования профессиональной компетентности будущих педагогов (участие в проблемных группах, научных кружках, конференциях выполнение творческих и исследовательских заданий, в творческих мастерских, волонтерской деятельности) позволила дополнить профессиональное образование будущих педагогов комплексом специфических заданий по вопросам педагогической деятельности, активизировать учебную деятельность и познавательную активность студентов, решить следующие задачи:

- расширить комплекс психолого-педагогических и методических знаний, умений и навыков, составляющих основу профессиональной компетентности, полученных в процессе формального образования (лекционные и семинарские занятия);
- сформировать, достаточный уровень профессионально-значимых качеств личности, позволяющих осуществлять педагогическую деятельность в современных условиях.

Оценка сформированности профессиональной компетентности будущих педагогов осуществлялась на основе уровневого подхода: *системный, ситуативный и стихийный. Системный* - студенты проявляют устойчивый интерес к педагогической профессии, осознано могут определить свою профессиональную позицию, ориентированы на профессиональные ценности педагогической деятельности, мотивированы на развитие профессионально значимых качеств.; педагогические психологические, методические знания систематизированы и глубоки, хорошо знает отечественные и зарубежные концепции образования. готовность всегда устанавливать поддерживать доброжелательные отношения с участниками образовательного процесса, обладает высоким уровнем коммуникативных и организаторских способностей. При разборе ситуаций легко ориентируется, предлагая конструктивные пути решения. Адекватный уровень ориентировки в своих возможностях и способностях, умение изменять состав действий в соответствии с изменениями условий образовательной среды. Стремление к самосовершенствованию. *Ситуативный уровень* - Студенты осознают значимость профессиональной педагогической компетентности, проявляю слабый интерес к проблемам образованья, не могут четко определить свою профессиональную позицию, ориентация на ценности профессиональной деятельности педагога не устойчива, слабо мотивированы на развитие профессионально значимых качеств. Поверхностное владение психолого-педагогическими знаниями. При определении понятий нет четкости и осознанности. Проявляет слабый интерес к вопросам образования. Поверхностно знаком с отечественными и зарубежными концепциями образования и воспитания. Коммуникативные и организаторские способностей выражены слабо. При установлении контактов с участниками образовательного процесса имеет место проявление конфликтности. При разборе ситуаций студент не всегда способен к конструктивному решению. Адекватный уровень ориентировки в своих возможностях и способностях, умение изменять состав действий в соответствии с изменениями условий полиэтничной среды. Стремление к самосовершенствованию. *Стихийный уровень.* Студенты не осознают социальную значимость профессиональной компетентности, интерес (или отсутствие такового), отсутствует направленность на педагогическую профессию. Имеющиеся психолого-педагогические знания не имеют научной основы, интерес (или отсутствие такового) к образованию не выражен, имеет отдаленное представление об отечественных зарубежных концепциях образования. Коммуникативные и организаторские способностей не выражены. При разборе ситуаций студент не способен к конструктивному решению. Студент не способен переводить цели и задачи обучения и воспитания в конкретные педагогические задачи урока, темы,

внеклассного мероприятия, не участвует в исследования по вопросам образования.

Результаты исследования
Results of the research

Анализ результатов работы, по формированию профессиональной компетентности будущих педагогов повалил сделать вывод, о том, что, чем богаче образовательный маршрут студента (активное сочетание формального (лекционные и семинарские занятия), неформального (участие в научно-исследовательской работе), информального (волонтерская деятельность, участие в педотрядах и т.д.), тем выше уровень профессиональной компетентности будущего педагога. В этом случае синхронно формируются все компоненты профессиональной компетентности

В тоже время, исследование показало, что при диагностике отдельных компонентов профессиональной компетентности результаты оказывались выше, чем конечный (интегративный). Это объясняется тем, что:

- во-первых, далеко не всегда студенты готовы применить сформированные знания, умения на практике;
- во-вторых, знания, умения еще недостаточно прочно сформированы;
- в-третьих, в вузе нет достаточных условий, чтобы профессионральная компетентность могла реализоваться в высшую степень готовности к практической деятельности;
- в-четвертых, формирование таких качеств, как адаптивность, коммуникативность, эмпатийность, рефлексивные умения могут актуализироваться в процессе диагностики, но оставаться в «пассиве», когда требуется их проявление в применении самостоятельных решений (поведение) в различных ситуациях.

Таким образом, профессиональная компетентность педагога как высшая степень готовности к решению профессиональных задач в образовательной среде, требует системного, целостного единства знаний, умений и практического опыта, позволяющего будущему специалисту быть готовым к данному виду деятельности, что в условиях вуза далеко не всегда может быть достигнуто в полной мере.

Обобщение
Conclusions

Обобщение многолетнего опыта практической педагогической деятельности в университете позволяет констатировать, что формирование профессиональной компетентности педагога на вузовском этапе непрерывного образования обеспечивает триединство: обучение, исследование и воспитание. При этом учебно-воспитательный процесс строится как многоуровневая система, предлагающая множество образовательных маршрутов. Основные принципы конструирования комплекса гуманитарных знаний формулируются на основе системно-деятельностной идеологии (сообразно вышеизложенным целям и задачам высшего образования):

- универсальность – полнота набора гуманитарных дисциплин, обеспечивающих базовую подготовку к формированию профессиональной педагогической компетентности;
- фундаментальность – научная основательность, современность и высокое качество базовой общегуманитарной и психолого-педагогической подготовки;
- интегративность – междисциплинарная кооперация научных исследований и учебных дисциплин общекультурного (гуманитарного) и социально-предметного блоков, достижение содержательного и структурно-функционального единства учебного процесса;
- последовательность и преемственность содержания дисциплин, обеспечивающих вхождение личности в современное образовательное пространство.

Проведенное исследование показало, что вузовский этап непрерывного образования обеспечивает формирование первичной профессиональной педагогической компетентности, дальнейшее развитие которой происходит в процессе профессиональной деятельности при условии непрерывности образования.

Summary

The paper presents organizational and pedagogical conditions for effective forming of professional competences in future pedagogues.

A research reveals the importance of interconnection and complementary of social and human and psychological and pedagogical coalitions as most important way of forming and developing professional competence in pedagogues in process of higher education. Also important was implementation of special courses in process of higher educational process.

Special courses and social and human and psychological and pedagogical subjects complement one another meaningful and substantive.

Application of interactive methods was a base of forming professional competence in context of teaching force (an artificially created situation, role-playing games, trainings and so on).

However, it's impossible to form professional competence only via lectures and workshops.

That's why invariant system of forming professional competence in futures pedagogues (participation in a task force, science clubs, conferences, making creative and research work, participation in Student Scientific Research Project, national creativity circles, volunteerism) allowed to complement professional education of future educators with the complex of specific tasks in educational work issues, activate learning and educational activity of students. This has made it possible to tackle the following tasks:

- To forming complex of psychology and pedagogues and methodic knowledges, know-how that is a base of professional competence of pedagogue;
- To forminglevel of professional behavior that help to do the pedagogic work in rapidly changing society.

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TRANSFORMATIONAL PARTNERSHIPS: DEVELOPING EFFECTIVE UNIVERSITY-ENTERPRISE COOPERATION

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Abstract. *This paper deals with the engagement of Higher Educational Institutions (HEIs) with the outside world, and how academic institutions build their relations with public, private and professional organisations. The research explores university-enterprise relations and the issues of employability of students in the 21st century, how universities respond to new demands and requirements in this field. The current research is based on the analysis of strategic planning in UK universities and considers several case studies as examples of developing mutually beneficial 'transformational' university-enterprise partnerships. The research analysis of the collected data aims to explore the importance of university-enterprise partnerships for students, academics, universities, and employers and how universities ensure effective developments in the field. The results of the research show that strategic planning is key in developing effective university-enterprise relations, and the strategic targets can only be achieved when there is evidence of active engagement of university staff and students in the process cooperation with enterprises.*
Keywords: *CareerEdge model; employability; strategic planning; transferable skills; transformational university-enterprise partnership.*

Introduction

The importance of relations between Higher Educational Institutions (HEIs) and their socio-economic environment has become a topical issue in the last 20 years. Employability of university graduates and ensuring stronger relevance of universities' activities within their economic environment has moved high on the agenda of governments and higher education governing organisations. This paper analyses university-enterprise relations and considers several samples of partnerships in order to propose a few possible routes of development.

Before we proceed to the analysis of university-enterprise relations and how they are currently developed in the UK, it is useful to define major terms we are using in this paper when describing university-enterprise relations, strategic planning and implementation. It is worth noting what we understand under the term 'enterprise' from the very start of this paper. In this paper, the term 'enterprise' is used not only in relation to a business, commercial company or firm

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but also to any public or private organisation. At the same time, the employability is considered as one of the most important elements and the driving force of university-enterprise relations, which has a direct impact on their development and expansion.

What is employability? It is not a new concept within the higher education, and as well as enterprise and entrepreneurship these terms "may be found in curricular, co-curricular and extracurricular activities".[1] Employability incorporates a set of achievements of students, their skills, knowledge and understanding of subject specific and more general processes and events "that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy" (Yorke, 2004). This definition clearly underlines that it is not the same as gaining a graduate job, but it is rather about the capacity of graduates to function successfully in the outside professional world and being able to move between occupations and at the same time being employable throughout their life. Pool and Sewell (2007) developed Yorke's approach further and came up with the *CareerEdge model* which identified the following five key elements for students' employability:

Career Development Learning combines the knowledge, skills and experience to help students manage and develop their careers. It is vital for our current and future students and the HE as a whole. It ushers in a new era when the teaching and learning have to change dramatically in order to absorb all innovations. It is not enough to provide the information and memorise it any more when the information is readily available on the Internet, when students can easily find the required data themselves. They should be taught and practise how to find the right information in the ocean of various publications and how to assess the data received and what methods to apply. They need to develop creative thinking which will enable them to use the data and information in accordance with their specific needs. It is therefore, the education is moving to 'experiential learning', 'project work', and 'research'. Students need better understanding that the process of learning does not stop when they graduate, it is a continuous process through their life experience. This is particularly important today when all professional fields undergo rapid development, and the knowledge obtained during a course often becomes obsolete when students graduate.

Experience: work and life experiences enable students to develop a broader range of skills and knowledge which may be attractive for prospective employers. Therefore, the curriculum should incorporate the opportunity for practical experience in a workplace.

[1]Enterprise and entrepreneurship guidance: Guidance for UK higher education providers (2018), p.7. Available at http://www.qaa.ac.uk/en/Publications/Documents/Enterprise-and-entrpreneurship-education-2018.pdf

Degree subject knowledge, understanding and skills: students should receive degrees which allow students better understanding of key principles, methods and approaches in their subject area which will allow them to develop their knowledge and skills in their future employments.

Generic skills are often referred to as 'core skills', 'key skills' or 'transferable skills' (Pool & Sewell, 2007: 11). They may include imagination/creativity, adaptability/flexibility, willingness to learn, independent working/autonomy and working in a team, ability to manage others, ability to work under pressure, good oral communication and communication in writing for varied purposes/audiences, numeracy, attention to detail, time management, assumption of responsibility, decision making, planning, coordinating and organising ability, ability to use new technologies and software (Pool & Sewell, 2007: 12-13).

Emotional intelligence, i.e. "the capacity for recognising our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relations" (Goleman, 1998). This is important for developing effective working relations and in various other situations, e.g. recruitment, contacts with external partners, creating communities of practice and professional networks.

The concept of employability has received further development in many research papers in the field of education in the UK and overseas (Brown et al., 2013; Andrews & Higson, 2010; Song Ju et al., 2011; Teijeiro et al., 2013). The data collected by the above researchers shows that nowadays the degree alone is not enough anymore, that transferable personal competences become increasingly important for students and graduates to find jobs and ensure continuous development of those skills throughout their entire professional careers.

Employability and university-enterprise relations

Enterprises and the way universities, faculties, schools or departments build their relations with enterprises have a major impact on developing all five elements of CareerEdge model. University management realised that this is key for the success of their graduates and hence, the success of the HEI, attracting more students willing to enrol on their courses and possibly leading to higher institutional ranking. Another factor was the external influence, especially when the *EntreComp framework*[2] was published in 2016 which sets to become a major document for any initiative aiming to foster entrepreneurial development in the EU. The UK Quality Assurance Agency (QAA) published *Enterprise and*

[2]See EntreComp: The Entrepreneurship Competence Framework. (2016). Available at https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/entrecomp-entrepreneurship-competence-framework

entrepreneurship guidance in 2012 and developed this document further and published in 2018[3].

This rethinking of the current situation in the Higher Education and society pushed the universities in the direction of developing links with enterprises and creating employability strategies or incorporating objectives related to employability or university-enterprise relations in their university strategic plans. It is therefore, our research aims to analyse these strategies and planning in UK Higher Education in the 21st century.

Our analysis of strategic plans published by UK universities shows that around 64 % of universities in the UK have developed distinct employability or university-enterprise strategies. At the same time, around 32 % of universities incorporated employability and the development of university-enterprise relations in their overall strategies and strategies related to research or innovation, e.g. Research and Innovation Strategy of the University of Plymouth, Research and Enterprise Strategy of the University of Bristol.

Those universities which developed distinct employability strategies incorporated numerous targets and objectives, e.g. The E3 Strategy: The Employability, Employment and Enterprise at Manchester Metropolitan University. Some other universities presented their aspirations in the field of employability and enterprise in the form of an action plan, e.g. Employability Sub-Strategy Action Plan at the University of Essex. There was a small group of universities which developed separate employability and enterprise strategies. On the whole, universities showed a variety of approaches and realigned their strategic planning accordingly.

Most of these developments in the HE coincides with major changes in the system of funding and increasing tuition fees. Our data show that the move to re-evaluation of the importance of employability skills in the HE and the development of employability and enterprise strategies began in 2008 and continues until now. Please see Table 1 for more details.

Table 1 **Development of Employability and Enterprise strategies at UK universities**

Strategies	**2008/10**	**2011/14**	**2015/17**
Employability	16	39	31
Enterprise	14	27	15

As you may see in Table 1, the peak in the development and publication of employability and enterprise specific strategies falls on the period of 2011/14

[3]Enterprise and entrepreneurship guidance: Guidance for UK higher education providers (2018). Available at http://www.qaa.ac.uk/en/Publications/Documents/Enterprise-and-entrpreneurship-education-2018.pdf

when 66 universities adopted new strategies with an aim of expanding relations with enterprises and developing entrepreneurship, and employability skills. In a way, this was as a direct response to the publication of the QAA *Enterprise and entrepreneurship guidance*. Although, in many cases these were only statements and intentions, the work has begun in a number of directions, i.e. supporting innovation and links with public and private organisations, creating centres or units to lead on new developments in the field, setting up accelerators and specialist business incubators, where students and graduates learn how to start a business and receive support from experienced colleagues.

Internationalisation of higher education was reflected in many strategic plans adopted by UK universities. In this area, we observe a shift from 'transactional' to 'transformational' and 'transcendental' partnerships (Sutton, 2010; Sutton et al., 2012). New 'transformational' mode of partnership explores how institutions can change and adopt new practices in line with the demands of the new generation of students, national and international employers and professional organisations and develop or enhance programmes for the benefit of students, combine resources in certain fields or even establish national or multinational units which serve a very specific purpose of providing high quality education and enhancing employability of students (Krouglov, 2014).

Our research data shows that such centralised approach still prevails across many universities where management aims to channel the process in the right direction in order to overcome internal and external challenges. The plans aim to address those challenges and engage academic staff and students in this process. This is not always easy due to various reasons. Our case studies show how staff and students may engage with employers and enterprises and develop necessary skills outlined by Pool and Sewell (2007) in their CareerEdge model.

Case studies: developing relations with employers and other organisations

The following case studies represent the experience of academic staff and students at London Metropolitan University where they applied CareerEdge model in developing transformational university-enterprise partnerships.

1. The first case study: MOU with the United Nations

Having successfully gone through the selection process organised by the Department for General Assembly and Conference Management (DGACM), United Nations, the Translation and Interpreting Department, London Metropolitan University signed the Memorandum of Understanding with the United Nations for the training of high level language professionals[4]. This

[4]The MOU between the DGACM, United Nations and London Metropolitan University was signed in 2013. See more information by following the link https://languagecareers.un.org/dgacm/Langs.nsf/page.xsp?key=Outreach

initiative opened new opportunities for students and graduates in 22 MOU universities worldwide, e.g. internships and placements, practical visits to various UN organisations, virtual classes and workshops with experienced UN professionals and their regular visits to universities. UN language staff give presentations and master classes; or participate in seminars and workshops at the HEIs. They also meet with students and academics to present the work of UN language staff, give more details about the skills needed by international organisations, or provide guidance to teaching staff for classroom activities that would help prepare good candidates for the Language Competitive Examinations (LCEs). They provide advice and suggestions about the curriculum and materials used. Universities also engage UN language staff in course revalidation and quality assurance reviews.

This partnership receives very positive feedback from students and staff and allows HEIs to work closer with the employer and introduce necessary changes. It also raises the profile of the university and allows to attract better prepared and highly motivated students. While the employer receives candidates, who are better trained to pass the LCEs and work successfully in international organisations, universities are able to enhance their programmes and bring them closer to specific requirements of employers.

It looks like an ideal partnership, however, like in all partnerships, there are some challenges which require patient and consistent work on both sides. One of the main issues which regularly comes up in the feedback and various reports is the insufficient number of contact/practice hours during the course. The employer constantly asks universities to increase the number of contact hours, while HEIs are usually reluctant to increase the number of hours due to academic regulations and the cost of additional training which could lead to the increase of tuition fees and make the course unaffordable for many candidates. Those HEIs which increase the tuition fees will inevitably see their student numbers drop and this may eventually lead to the closure of the degree. This is perhaps the major challenge in this type partnership.

Another challenge which HEIs face is the need to employ professionals for the provision of practical classes. This sometimes presents certain difficulties since those professionals may not have availability or necessary teaching skills and experience. The latter one is usually resolved through Training for Trainers courses or other teaching courses organised by HEIs. However, in some very specific niche fields it may be difficult even to find an expert where the university is located. In this respect, cooperation between universities and other partner organisations/employers is crucial in resolving those issues.

2. The second case study: developing partnerships with professional organisations

Many degree courses in the UK have established partnership relations with professional organisations. This is not something new. Close links between Health professional associations and universities have existed for many years now. This collaboration significantly enhances teaching and learning at HEIs and allows students to obtain more practical skills and understand better how institutions work in the field of health. At the end of the last century, there was a drive to expand cooperation with professional bodies in other areas, e.g. creative arts, business, education and many others, especially where the course offers training of specific professional skills.

Our case study is the growing partnership between the department of Translation and Interpreting and the Chartered Institute of Linguists (CIOL) which is the leading UK-based membership body for language professionals offering a range of fully regulated professional qualifications for linguists around the world[5]. The CIOL has established partnerships with many HEIs[6]. London Metropolitan University and the CIOL have been working together for many years now, mostly in the fields of Translation and Interpreting. The agreement between two institutions allows London Met students who show good results during their translation course and in their final assessment, receive an award from the CIOL in the form of an exemption from Unit 1 of the Level 7 Diploma in Translation[7]. This is an excellent opportunity for students to have both academic and professional degrees at the end of their university course. The CIOL also benefits from increased membership and more students interested in other qualifications offered by the Institute.

The above account covers fields which identify the main points and directions of this partnership, however there are even more important connections between these organisations which allow to shape the profession as a whole. One of them is the collaboration between professionals of both institutions. For example, university academics may serve as examiners of CIOL professional qualifications, while at the same time university students receive feedback from the CIOL professional translators. This collaboration ensures better understanding of current professional requirements and continuous enhancement of teaching, learning and assessment in the HEIs. CIOL translators also offer workshops to students and are engaged in the development and validation of university degrees. Such cross-fertilisation realigns degrees with the requirements of the professional world. This is only one example of cooperation with professional organisations.

[5]See more information about the Chartered Institute of Linguists by following the link http://www.ciol.org.uk/
[6]See language partners of the CIOL by following the link http://www.ciol.org.uk/language-partners
[7]See an example of BA Translation by following the link http://www.londonmet.ac.uk/courses/undergraduate/translation---ba-hons/

Many other university courses received professional accreditation from various professional institutions.[8]

These two case studies of mutually beneficial 'transformational' partnership relations show how university-enterprise relations could be initiated and developed at the course or departmental level and enhance teaching and learning. The role of the HEIs is to encourage and support these developments through various structures, e.g. university-enterprise partnership or employability offices. It is also crucial to disseminate this experience at the university level so that academics in other degrees expand their horizons and develop new opportunities for students and academic staff.

Conclusions

How can we achieve the most effective University-Enterprise relations? The research and the analysis of case studies covered in this paper point into several directions.

One of the founding principle in developing employability and university-enterprise relations is the successful strategic planning incorporating key targets and objectives and identifying possible challenges. Strategic plans are often aimed at 'transformational' type of partnerships and may include curriculum development in line with the five key elements of the CareerEdge model, research and governance. Such partnership enables universities to learn from the experience of others, introduce changes and develop either specific strategies dealing with issues of employability and university-enterprise relations or incorporate those targets in their overall strategic plans.

The strategic targets can be successfully achieved only when there is evidence of active engagement of staff and students in the process. Our case studies showed, that often the most successful partnerships are initiated at departmental levels where academics are aware of specific professional requirements and needs in their field and work towards the recognition of their courses in the form of partnership relations and associations. They may also find it easier to establish these contacts and engage more effectively with enterprises and professional organisations working in their fields. Universities and staff need to engage students in this process since university-enterprise partnerships enhance their learning and improve their employability. This is still an area for further development.

University central bodies dealing with university-enterprise and employability should support and encourage these developments at all levels,

[8]See more examples from the Guildhall School of Business and Law http://www.londonmet.ac.uk/schools/business-and-law/

especially at departmental/course level. The role of central bodies coordinating employability and university-enterprise relations will be to identify key directions in line with the adopted strategic plans and needs and requirements of each faculty and department and to facilitate the process.

Our findings also showed that students need a new set of skills in line with the proposed CareerEdge model. Apart from professional skills and knowledge, students need to improve their transferable skills, emotional intelligence, get some experience and be prepared for career development learning. The five elements identified by Pool and Sewell (2007) should be key in curriculum development and enhancement.

Apart from these issues, it is crucial for an employer to become an active player in university life and engage with academics and researchers, the cohorts of students and the courses so that they could achieve better understanding of teaching and learning provided by partner universities and introduce changes contributing to the enhancement of training and bringing it closer to real-life situations. Our research confirms that employers should become active participants in curriculum development and quality assurance procedures if they want to achieve their goals in training the best specialists in their professional fields.

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ADAPTATION TO CHANGES ON THE JOB MARKET - THE ROLE OF CAREER COUNSELING FOR STUDENTS

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Abstract. *Professional counseling for students plays an important role and support for students in the transition process from education to the labor market. However, in order to be effective, the content of consultancy services should be adapted to the real needs of students (often resulting from transformations in the education and work market). This study indicates selected challenges faced by contemporary students (future graduates) in the context of the dynamics of the labor market development but also adaptation to permanent changes in this market.*
Keywords: *career counseling, student, graduate, adaptation, job market.*

Introduction

Career counseling is a process whose purpose is to help a counseling individual to plan and then pursue a professional career. This assistance may include support in making choices, making educational and career decisions, setting objectives, further career development plans, or during adaptation and professional self-improvement (Lamb, 1993). Depending on who is the addressee, slightly different roles and tasks are assigned. In the case of students and graduates, the tasks carried out by the career counseling services can be considered very broadly. An important issue, however, is to adjust the content of these services to the real needs of future graduates. For the support to be effective, one should, first, be aware of the challenges facing young people - their dilemmas and the specific situation with which they are currently struggling. In this context, it is important to be aware of the changes currently taking place in the education and labour market - these changes often set new tasks and goals for students and graduates in the context of the transition to the labour market.

Nowadays, one also hear about career counseling, which is aimed at showing the possibilities of life and development (supporting people in programming different spheres of life in conditions of permanent change). Career as a way of life, a mosaic of episodes of life, where the goal of career

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counseling is to plan and adapt the individual to undertake projects in an individual biography of choice. Career counseling is evolving towards helping people diversify the portfolio of investment into a career and deal with the negative effects of changes in personality. Because in the era of globalization, no career scenario guarantees success, the counseling task is focused on helping clients reduce the risk of functioning.

Adaptation to changes in the area of professional work

Specific challenges for future graduates arise from changes in the labour market. "An economic crisis characterized by a decrease in production (...), limited ability of the economy to absorb labour resources, entering the labour market of baby boomers, (...) discriminatory, recruitment practices of employers" (Pirog, 2013) are selected aspects affecting the current situation of young people on the labour market. It is worth mentioning that currently the competency requirements for candidates for work are changing (Budnikowski et al., 2012) (soft competences are increasingly valued), which students should be particularly aware of. In addition, in the aspect of the specific nature of the modern labour market, the particular challenge posed to young people is not so much the effective job search and efficient responding to the needs of the labour market, but creating them (in line with own capabilities, talents, predispositions, aspirations and needs). The above changes are not indifferent to the way of planning and managing a career by students in the contemporary realities of the education and labour market. Therefore, they should also be a kind of a challenge to professional counseling (Pukelis, 2014).

Modern labour market forces jobseekers to constantly improve their skills so that they can become a competition for others. The competition is so huge that today it is not enough to finish only one field of study. In the present reality, a person has to learn practically all his life, of course if he wants to get a job that is satisfactory for himself. That is why, in the modern labour market, it can be also noticed that more and more people get high qualifications, thus they are required to when applying for a job. And this leads to the fact that the value of qualifications in the labour market drops as more and more people get them. This situation means that professional competences are not so much a decisive factor in employment. Employers demand higher qualifications to take up the same position. Thus, the demand for higher qualifications increases, but this is not due to the fact that the same positions require more skills. This situation contributes to the fact that successive generations of young people need to acquire higher and higher qualifications to meet these requirements. F. Drucker also points this out by stating that "contemporary society must be a society of educated people in order to be able to develop, grow and even to exist". It can be

concluded that the relationship between education and the labour market will be closer. Different forms of vocational education will gain in importance. Following the example of EU countries, more and more initiatives will be taken to encourage the prolongation and supplementation of education (promotion of lifelong learning).

Undoubtedly, situation in which future graduates find themselves now is not easy for them. The stigma of the economic crisis, uncertainty and instability in many industries mean that employers are more and more afraid to employ new (and what's more, young, inexperienced) employees based on an indefinite contract of employment. Young employees - students and graduates are more often employed on fixed-term contracts. From a rational point of view, it is hardly surprising for employers who usually prefer to first check the competences and skills of a new employee before offering him indefinite contract. However, it is also hard to be surprised by the fact that young people feel dissatisfaction about it, and sometimes they even emphasize that it is a kind of discrimination on the grounds of age. Especially that - as research shows - young people often expect job security and stable jobs from their work and future employers (Wziatek-Stasko, 2014). However, the sense of stability is not provided by temporary contracts - which may even favour the feeling of anxiety and frustration, and lead to various - sometimes irrational decisions (e.g. related to emigration, interruption or abandonment of education, or reckless professional retraining, not to mention the longer process of becoming self-reliant, delay in making decisions about starting a family, etc.).

At the moment, the unemployment rate among students is higher than in the case of other age groups (table 1)

Table1 **Unemployment in Poland according by Central Statistical Office**

Age group / **Year**	**2016**	**2017**
All respondents	8,3 % (1.324 thousand)	6,8 % (1.117 thousand)
under 24 years	18,0%	14,7%
25-34 years	6,4%	4,8%
35-44 years	4,5%	3,8%
45-54 years	4,1%	3,3%
More than 55 years	4,2%	3,3%

Źródło: own elaboration based on Central Statistical Office in Poland, Warsaw 24.11.2017

The high rate of youth unemployment (under 24 years of age) is also observed in Europe (Table 2).

Table 2 **Youth unemployment rate in selected EU Countries (as at 31.12.2016)**

Country	**Youth unemployment rate (people under 24)**
Greece	47,7
Spain	45,2
Italy	37,2
Croatia	32,2
Romania	20,5
Latvia	19,1
Average in the EU	*19,1*
Sweden	19,0
Ireland	18,2
Poland	18,0
Lithuania	16,6
Estonia	15,4
Bulgaria	15,2
Hungary	13,7
Malta	10,6
Germany	7,3

Źródło: own elaboration based on Eurostat and Central Statistical Office in Poland, 31.12.2016

It is also pointed out that young people have problems with finding employment, and more and more employers see difficulties in finding a suitable candidate for work (and in this context, one can point to a specific competence gap). It is extremely important to match educational and professional choices to the needs of the job market. These needs are subject to frequent changes, which result from the dynamics of the transformation of the economy and the labour market. It is therefore very important that young people have unlimited access to the latest and most reliable information about the labour market. This access should be provided by the career counseling system.

According to the *Youth in the labour market* report, the majority of surveyed students and graduates do not raise their competences, nor do they plan further education / training. Even when they are unemployed (Jelonek et al., 2015). Perhaps this is due to the fact that they do not have knowledge about the labour market demand (and thus they do not quite know which competences should particularly develop). Lack of proper knowledge about the labour market can effectively hinder adequate selection of content and forms of professional development. It is mainly on the basis of the expectations of the labour market, of own predispositions, aspirations, career goals as well as possible weaknesses as a future employee, students should define their needs and plans for professional development.

The labour law, the structure of employment are also changing, the expectations of employers towards employees are different. The demographic situation and the implementation of numerous economic reforms affect the size and quality of human capital, which is the basic creative spark in the market economy. All the above factors have an impact on the labour market, which largely determines the structure of the professions. The future is perceived not as a time of professional success and career, but as a time of uncertainty and social risks (Fitoussi, 2000). Only choosing a good career path can eliminate this uncertainty. Changes in the way companies are organized and operated, changes in the way goods are manufactured, changes in the behaviour of individuals have a significant impact on the professional decisions of the human being. This is no longer a one-off process, obvious and predictable. Each graduate must be prepared not only for an active search for employment, but also for the fact that it will not be a permanent place of work.

Career counseling in view of changes in the labour market and student problems

Constantly changing conditions and the multidimensionality of the reality in which we live, require constant adaptation of counseling to the requirements of both society and economy. Career counseling is currently not needed only at the stage of choosing a school or the direction of vocational education. It is a necessity to supplement qualifications, the need for constant learning, improvement, and very often complete retraining - these are the challenges facing the counselor and client who must adapt to a completely different life, to a job that requires full commitment and determination. It is not possible to predict changes taking place in the world of work and their impact on the individual's professional life. One should be ready for changes, fast in taking up new challenges and flexible in the labour market, unfortunately increasingly shrinking in many industries.

For many years in Poland the course of professional life was predictable. It was possible to plan the completion of school, studies, the acquisition of skills in a given industry, to take specialist or managerial positions in the next stage of career. The contemporary career is not so regular (Mrozek, 2009). What counts is the present, what is today, the possibility of planning is not so much impossible as even dangerous. Career counseling must tend to minimize distress related to the future. Showing alternatives, discovering potential in every unit makes it possible to ensure at least a minimal sense of security and durability. Life choices of advisors' clients are not choices for life, but they can become the beginning of something new, inspiration, a signpost. We cannot stop planning, but it must keep up with changes. Only then will it make sense. And it will be a

form of help and support for the individual, not another vision of failure. This is extremely difficult to achieve, especially if the advisor's relationship with the client is superficial. Only counseling based on the principle of subsidiarity and full confidence is able to help a person in need.

The development of career counseling should be connected with the emergence of prosperous societies, with a high, sustainable culture and civilization of educated people, and democratic societies. The complexity of the problem of unemployment in a market economy leads to socio-economic solutions, which to a large extent take into account the "human factor" as a superior value and this understanding of the market economy leads to its definition as a social market economy. Such economy, from the point of view of economic sciences, is like a part of the whole discipline called social economy, which means to perceive economics in such a way, that the market and its laws assume the existence of social needs that must be satisfied, sometimes contrary to the laws of the free market. Dorota Pienkowska points out that "*the concept of social economy is very broad and affects many spheres of social life."* She considers an important feature of the social economy "*the primacy of action for people, maximizing profit"* (Pienkowska, 2009). Career counseling in this reality finds its place and justification. Particularly because the market economy carries with it numerous problems of great importance for individuals and entire communities. The factors that influence the increase in interest in consulting are, inter alia, the development of industry, technology and technologies and its consequences, such as the growth of the agglomeration urbanization, atomization of life, etc., the general increase in knowledge and public awareness, pluralism of views, attitudes, related to the development of social communication, increased dynamics and diversity of social life forms, and thus an increase in the number of difficult situations.

Not many companies notice the need to develop their employees' careers. It is also indicated that the demand for consultancy services is greater than their supply. Therefore, an effort is needed to promote consultancy with the use of modern telecommunication and information technologies in order to reach the risk groups with the offer of support. Attention is also paid to the need to improve systems supporting the quality of career counseling and the qualifications of the advisory staff.

Career counseling on the market overwhelmed by unemployment is needed and should be developed. This development seems to be inevitable as a trend resulting from the fact that modern societies operate in conditions where the demand for any counseling, for example marital, psychological, financial, and occupation, including employment, is growing and such professions of advisers undoubtedly have a future.

With regard to the dynamics of socio-economic processes shaping the image of the present day, the challenges - which face career counseling - can be characterized taking into account the criterion of goals and tasks, as A. Kławsiuć-Zduńczyk (2010). writes. These are, among others:

- supporting clients in acquiring the skills necessary to function effectively in a society of risk - among others, we talk about the ability to anticipate dangers and to shape adaptive abilities, to deal with threats,
- awareness of the risk situation - by pointing out to people who cope with certain threats resulting from social changes,
- informing clients about the latest tendencies – which include, for example, the need to constantly upgrade the qualifications and competences, lifelong learning, the ability to demonstrate flexibility, openness to changes,
- providing practical consulting advice - that is, providing clients with specific information on what opportunities they have to acquire the desired qualifications and competences, especially those that meet the needs of the modern labour market, without forgetting about those that satisfy the client's needs,
- indicating and shaping the client's competences necessary to manage their own professional and educational careers - by providing information on ways to acquire relevant knowledge. The task of a vocational counsellor is also to encourage clients to self-development, indicating what kind of meaning it plays and what benefits it can bring.

Career counseling is a requirement of time resulting from Poland's entry into the European Union, economic changes and rising unemployment. It is a process of helping people achieve a better understanding of themselves in relation to choosing the right school and proper professional adjustment. Its purpose is to familiarize the seeker with: its possibilities and interests; opportunities in relation to the labour market; economic conditions; contraindications and special requirements; types of job search; skills of contacting employers (Banka, 1995).

In the modern world, it is increasingly difficult to find stable employment and a regular professional career with numerous promotions, long years of service and access to certain benefits. Equal career times, and thus guaranteeing the same career to people with the same abilities - have gone forever. At present, even the professional career of climbing at particular levels of this career is not mentioned, because the path of modern man's life is too uncertain and does not accumulate merit or entitlements, but is constantly changing. Globalisation has led to a situation in which the labour market primarily appreciate the flexibility,

creativity and speed of switching to a new style of operation. The world is unpredictable and is perceived as a world of multiple crises: traditional systems of control and power, work and uncontrolled rise in unemployment, social life and family, loss of sense of identity (Janczak - Obst, 2002).

Career planning is a necessity that every young person faces. Work should be not only a source of income, but also professional satisfaction resulting from developing your passions, pursuing your interests and personal development. Making decisions about schooling at various levels and choosing a profession should be a decision-making process that lasts for a long time. Professional development covers the entire human life, and the current situation on the labour market makes it necessary to adapt own professional qualifications to existing job offers.

Planned and thoughtful approach to the period of study allows for multi-aspect development, for example, by gaining the necessary knowledge in own university and foreign trips as part of scholarship programs, enabling intercultural experience, learning about diversity in the approach to learning, information exchange. Studies are a period that also allow to gain experience within the framework of program and extracurricular practices and volunteering. Many young people acquire new skills during this period, raise their qualifications beyond formal education.

Activities towards the construction of individual career plans and defining the needs in the field of professional development should constitute an important area of career counseling offered to students and graduates. This assistance may consist in: supporting students and graduates in specifying career goals and plans; providing them with information on the needs of the labour market and information on the opportunities that they can use in relation to improving their competences, providing assistance in the selection of content and forms of professional development - so that they are adequate to the needs of the job market.

Conclusion

Changes related to the functioning of higher education, such as: its greater diversity, flexibility of educational offers, marketization of higher education, increase in enrolment rate, student migrations, greater access to trips (domestic and foreign) are only selected factors affecting the way of studying, making choices, shaping yourself as a future employee, planning your own educational and career. These changes properly used by students can significantly facilitate broadly understood professional development. Wide access to education, the diversity of educational fields, the multiplicity of possibilities and forms of educational development (such as participation in academic clubs, conferences

for students, foreign trips, etc.) mean that currently educational and vocational development can be planned in many different ways. On the other hand, this multiplicity of possibilities may cause some dilemmas, difficulties in choosing the most appropriate form of development. Information chaos, which accompanies, for example, the marketization of education, and thus the emergence of many different - often interesting, though mysteriously sounding specialties may cause difficulties in choosing the right educational direction. The one that will be consistent with both the predispositions of the individual and the demand of the labour market. In connection with the above, students more and more often may need support in planning their own educational and professional career or obtaining reliable professional information.

It is also worth emphasizing that in the aspect of the specific nature of the modern job market (resulting from a kind of stagnation of the economy), the particular challenge posed to young people is not so much an efficient job search and efficiently responding to the needs of the market, as creating them (in line with their own abilities, talents, predispositions, aspirations and needs). This approach to designing own career and self-creation of market opportunities by students and graduates can determine their advantage in the market and lead them to success. Therefore, it should also be a kind of a challenge to career counseling (Pukelis, 2014). The role of advisers should not only be informing and advising (e.g. in terms of opportunities for improvement or professional retraining if necessary), but also stimulating students and graduates to creatively develop their own careers and lifelong education.

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ДИФФЕРЕНЦИРОВАННЫЕ ЗАДАНИЯ КАК ФАКТОР МОТИВАЦИИ УЧЕБНОЙ АКТИВНОСТИ В ПРОЦЕССЕ ПОДГОТОВКИ БУДУЩИХ ВОСПИТАТЕЛЕЙ

Differentiated Assignments as the Learning Activity Motivating Factor in the Training of Future Preschool Teachers

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Abstract. *The articles's aim is to describe the features of introducing differentiated assignment for homework and classroom work and their impact on the activation of cognitive, social, professional, value motives of the training of future preschool teachers in the pedagogical process of the university. The analysis of scientific research in this area allows us to state that the differentiation of teaching materials, the provision of the student with the choice of the complexity of the assignment, the establishment of constructive feedback are an integral part of the motivational environment that should ensure the student's active personal position in the process of cognitive constructive activity. Differentiation of training during the classroom allows to ensure the assimilation by all students of the educational content, which assumes an invariant (mandatory part of the program material) and an optional part that involves the complexity of assignments. The main goal of differentiation in teaching is to determine the most rational nature of the work for each student, relying on their individual characteristics, preferences, abilities, time frames. Thus, the training of future preschool teachers with the help of differentiated tasks becomes important for them, the desire to comprehend the foundations of the profession, to learn, to interact with peers and the teacher.*
The author experimentally confirmed that the introduction of a differentiated approach to the development of content and its implementation in the practice of training future preschool teachers in higher school conditions contributes to improving the effectiveness of the educational process by activating cognitive, professional, social and value motivations of students, taking into account their individual inclinations and preferences.
The methodological basis of the research was the theoretical analysis of scientific literature on the problem; empirical research methods (pedagogical experiment, observation, interview, testing by the method of studying the educational activity motives (modification A. A. Rean & V. A. Yakunin)); statistical methods of processing results (the calculation of percentages, ranking).
Keywords: *motivation, differentiated assignment, individualization, the training of future preschool teachers, teaching, learning, activity.*

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Введение
Introduction

Согласно международному проекту Tuning Educational Structures in Europe, TUNING, реализация системы подготовки будущих специалистов предусматривает изменение подхода, ориентированного на преподавателя, на подход, ориентированный на студента, а это, в свою очередь обуславливает изменение самой образовательной парадигмы - от традиционного понимания сущности подготовки, основанной на принципах теории бихевиоризма, к философии и педагогики конструктивизма, рассматривающей процесс обучения как конструирование студентом собственной системы представлений, знаний, опыта, осознание значимости обучения и собственной ответственности за процесс и его результат, возможностей самостоятельного выбора собственных стратегий, инструментов, темпа, объема учебного материала.

Одной из характерных особенностей организации учебного процесса, исходя из конструктивистского подхода, является акцент на деятельности, дифференциации используемых материалов, форм обучения и повышения мотивации студента к обучению, поскольку познание немыслимо без мотивации и осознания его цели. От того, насколько мотивирован студент к обучению, какова природа этих мотивов, зависит качество, глубина и осознанность полученных знаний, приобретение практических навыков в сфере будущей профессиональной деятельности. Безусловно, студенты с разной мотивацией по-разному учатся и готовятся к занятиям, что отражается на конечном результате подготовки. Между тем, преподаватели высшей школы должны учитывать эти особенности при разработке учебного контента, поскольку не только профессиональное становление будущего воспитателя является важным результатом его обучения, но и то, как он будет воплощать полученные / неполученные знания и навыки в работе с детьми.

Целью данной статьи является анализ исследований, связанных с вопросами изучения особенностей мотивации студентов и факторов, которые влияют на ее повышение; обобщение основных подходов к вопросу дифференциации учебных заданий; раскрытие результатов изучения мотивации будущих воспитателей и процесса внедрения дифференцированных заданий для самостоятельной и аудиторной работы, их влияния на активизацию учебной деятельности, познавательных, социальных и профессионально–ценностных мотивов обучения.

Методологическую основу исследования составили: теоретический анализ научной литературы по исследуемой проблеме; эмпирические

методы исследования (педагогический эксперимент, наблюдение, беседа, тестирование по методике изучения мотивов учебной деятельности (модификация А. А. Реана, В. А. Якунина)). Среди статистических методов обработки результатов применялось вычисление процентных соотношений, ранжирование.

Анализ исследований, связанных с вопросами изучения особенностей мотивации студентов и факторов, влияющих на ее повышение
Analysis of studies studying the characteristics of student motivation and the factors that affect its increase

Основным механизмом совершенствования системы подготовки будущих специалистов является активизация учебной деятельности самого субъекта профессиональной подготовки; формирование у него стремления к самостоятельному выбору цели, умения брать ответственность за личностный выбор и его последствия; проектирование траектории собственной учебной деятельности, эффективности ее реализации с учетом личностных потенциальных возможностей, объективной оценки собственных достижений; коррекция и регулирования собственной познавательной деятельности (Богинич, 2008). Активизация познавательной деятельности студентов во время обучения возможна при условии возникновения стремления к овладению той или иной деятельностью, то есть познавательная активность и самостоятельность тесно связаны с мотивацией, а последняя, с познавательными потребностями.

В психолого-педагогических исследованиях, начиная с 70-х годов XX в., подчеркивается важность мотивации студентов в процессе обучения. Мотивацию рассматривают как ключевой элемент успеха студентов во время обучения и деятельности, внутренний стимул поведения или действий определенным образом (Jovanovic & Matejevic, 2014). Мотивация является процессом, во время которого целенаправленная деятельность зарождается, активизируется и поддерживается (Schunk & Mullen, 2013). Мотивация может рассматриваться как внутреннее побуждение к действию через обращение к чувствам, осознанную потребность, она определяет активность личности и ее направленность на достижение запланированного результата. Потребности и мотивы тесно связаны с интересами, убеждениями и идеалами личности. H. Tohidi & M. M. Jabbari отмечают, что люди имеют разные мотивы, поэтому перед тем, как кого-то мотивировать, нужно определить эти персональные характеристики и их движущие силы (Tohidi & Jabbari, 2012). Среди мотивов учебной деятельности ученые

выделяют познавательные, социальные, побудительные, профессионально-ценностные, меркантильные.

Мотивация учебно-познавательной деятельности у студентов должна быть связана с поиском внутренних условий повышения эффективности учебной деятельности. Учебная мотивация рассматривается как вид мотивации, включенный в учебную деятельность. Во многих случаях психологи под мотивацией подразумевают детерминации поведения, поэтому выделяют внешнюю и внутреннюю мотивацию (Ильин, 2002). Внутренняя мотивация возникает, когда люди внутренне мотивированы делать что-то, поскольку это приносит им удовольствие, они считают это важным, или они чувствуют, что то, что они изучают, является значимым. Внутренняя мотивация предполагает отсутствие какого-либо внешнего давления. Внешняя мотивация предполагает воздействие различных стимулов на поведение человека, которые ее регулируют определенным образом (Ryan & Deci, 2002).

Исследования H. Tohidi & M. M. Jabbari (2012) вопросов внутренней мотивации обнаружили, что она обычно ассоциируется с высокими образовательными достижениями студентов и удовольствием от осознания собственного развития. Студенты мотивированы, если они: объясняют свои результаты обучения факторами, находящихся под их личным контролем (например, затраченные усилия), верят, что они могут эффективно достигать желаемых целей (то есть результаты не определяются удачей), заинтересованы в освоении темы, а не просто обучении ради хороших оценок (Tohidi & Jabbari, 2012).

Понимание различных типов внешней мотивации и того, что способствует каждому из них, является важной проблемой для педагогов, которые не всегда могут полагаться на внутреннюю мотивацию для обучения, поскольку учебные задачи не всегда интересны или приятны. Определенный уровень внешней мотивации с течением времени может стать необходимым фактором роста и продолжения деятельности, даже в том случае, когда сначала не было необходимости во внешних мотивах (Jovanovic & Matejevic, 2014). Именно активные и предполагающие свободный выбор формы внешней мотивации положены в основу стратегии успешного обучения (Ryan & Deci, 2002). Возможность выбора и понимания того, что он есть, выступают важным фактором повышения мотивации учебных достижений (Anderson, 2016).

Важной в понимании сущности реализации идей конструктивизма в образовании, а также построении обучения с использованием дифференциации, является теория Self-Determination Theory (SDT) (Ryan & Deci, 2002). Самодетерминация понимается как способность индивида к

совершению и переживания выбора. Теория самодетерминации предполагает, что внешняя мотивация может быть осознана (интериоризированна) индивидуумом, если задачи соответствуют его ценностям и убеждениям и могут удовлетворить базовые психологические потребности. Мотивация достижения является одной из разновидностей мотивации деятельности, связана с потребностью индивида добиваться успеха и избегать неудач. Мотивация достижений в любом виде деятельности появляется, когда человек стремится быть в чем-то компетентным. Согласно теории самодетерминации, у всех людей есть фундаментальные психологические потребности в компетентности, автономии и родстве, взаимосвязи с другими людьми. Компетентность относится к необходимости чувствовать себя эффективным во взаимодействии с социальной и академической средой и реализуется, когда студент знает, как эффективно достичь желаемых результатов в общении или учебе. Автономия в теории детерминации рассматривается как степень, в которой индивид чувствует себя источником действия. Взаимосвязь с другими людьми предусматривает, что совместное обучение через команды (в том числе социальные медиа) может охватывать эмоциональный компонент мотивации. Наконец, обратная связь, которая учитывает самоэффективность и моделирование со стороны учителя, помогает в развитии практического поведения, связанного с достижением цели (Denzine & Brown, 2000; Hamjah et al., 2011; Figueira & Duarte, 2011).

Анализ научных исследований позволяет сделать вывод, что среди наиболее влиятельных факторов повышения мотивации у студентов следующие: предоставление свободы выбора индивидуальной траектории своего обучения; максимально возможное снятие внешнего контроля, построение учебных материалов исходя из интересов, ценностей, психологических и индивидуальных характеристик студентов, обеспечение своевременной обратной связи, создание посредством учебных материалов и форм активности ситуаций успеха и удовлетворения собственными результатами, желания осваивать новые знания; организация обучения на основе совместного обучения, обучения в микрогруппах, дифференциации.

Основные подходы к вопросу дифференциации учебных заданий
Basic approaches to the issue of differentiation of study assignments

Исходя из конструктивистского подхода, внешним фактором мотивации может выступать дифференцированное применение методов и средств обучения на основе учета индивидуальных особенностей студентов (различные типы интеллекта, личности, стили обучения и т.п.).

Дифференцированное обучение - это такая организация учебного процесса, при которой создаются условия, позволяющие каждому ученику раскрыть все свои потенциальные учебные возможности (Малафиик, 2015). В отличие от индивидуализации, дифференцированное обучение предполагает коллективную организацию труда и реализуется в рамках совместных нормативных содержательных позиций (Гусак, 1999).

При вариативности подходов к определению ведущих индивидуально-типологических особенностей студентов, их развитие в условиях применения дифференцированного обучения определяется, прежде всего, способностями, успешностью и мотивацией учения, составляющих основу типизации, определяющих позиции дифференцированной организации учебного процесса, выступающих качественными показателями, по которым изучается эффективность дифференцированного обучения.

Nadia Rousseau (2017) отмечает, что педагогическая дифференциация опирается на знание характеристик и потребностей студентов, применяется к организации класса в виде подгрупп, не вызывая постоянного эффекта, или варьируется от ученика к ученику в соответствии с определенным педагогическим режимом, определяясь характеристиками учеников. Этот подход может касаться элементов контента, связанных с ним процессов, производства и структуры (Rousseau, 2017).

Выделяют следующие типы дифференциации:

- исходя из способности к обучению (это качество характеризуется относительной устойчивостью и охватывает скорость процесса усвоения знаний, овладение приемами умственной деятельности);
- уровня развития способностей к обучению и работоспособности;
- уровня успеваемости, познавательной самостоятельности, то есть способности к обучению, организованности в учебе, интереса;
- способности к обучению (умения анализировать, синтезировать, выделять главное, самостоятельно мыслить; навыки умственной деятельности) и учебной работоспособности (физиологическая способность к труду, отношение к учебе, настойчивость, склонности, интересы).

Опираясь на исследования Гусака П. Н. (1999) дифференциация задач по операционному содержанию предусматривает разное количество операций относительно одинакового объема содержательной информации. Дифференциация задач по познавательной самостоятельности характеризуются однотипностью с операционно-смысловой точки зрения и разнообразием по мере помощи преподавателя той или иной группе студентов. Дифференциация заданий по уровню сложности содержания заключается в выполнении студентами работы, одинаковой по характеру

деятельности и различной по наличию элементов знаний, представлений, понятий об объектах и явлениях, связи и зависимости между ними. Автор выделяет 5 типов классификации дифференцированных заданий: по объему информации (углубленный уровень, достаточный, минимально необходимый); по уровню помощи преподавателя (самостоятельное решение, эпизодические подсказки, постоянная работа с преподавателем); по уровню использования алгоритма (указывается лишь условие задачи, указывается условие и алгоритм решения; указывается условие, алгоритм решения и дидактический материал); по темпам изучения (опережающий; адекватный; отстающий); по объему решения (полное решение, частичное решение); по уровням усвоения (поисковый (эвристический); алгоритмический, копировальный) (Гусак, 1999).

Дифференцированное обучение реализуется в трех формах: индивидуальная (каждый студент выполняет индивидуальные задания), индивидуально-групповая (часть задач имеет индивидуальный характер, остальные задачи выполняется группой) и групповая (задания выполняются всей группой). Самой распространенной из них является групповая форма. Исходя из своих психофизических возможностей и при условии соответствующего материального оборудования, стимулирования преподаватель может работать одновременно максимум с тремя-четырьмя различными типологическими группами (Сикорский, 2013).

Методология
Methodology

Исследование особенностей мотивации студентов 2 курса (72 студента) факультета дошкольного образования проводилось с помощью комплексной диагностики посредством методики изучения мотивов учебной деятельности (модификация А. А. Реана, В. А. Якунина), бесед со студентами, наблюдения во время аудиторных занятий для выявления факторов, влияющих на мотивацию во время аудиторных занятий.

Методика диагностики учебной мотивации студентов (А. А.Реан и В. А.Якунин) состоит из 16 вопросов, характеризующих коммуникативные, профессиональные, учебно-познавательные, социальные мотивы, а также мотивы творческой самореализации, избегания неудачи и престижа, среди которых необходимо выбрать 5 наиболее значимых. При обработке результатов определялась частота выбора мотивов в числе наиболее значимых по всей обследуемой выборке. На основании полученных результатов определяется ранговое место мотива в данной выборочной совокупности.

Анализ результатов, полученных по методике «Изучение мотивов учебной деятельности студентов» (А. А. Реан & В. А. Якунин), свидетельствует о том, что для студентов 2 курса (72 респондента) наиболее предпочитаемыми мотивами стали следующие: получить диплом – 75 % студентов (прагматичные); постоянно получать стипендию (прагматичные, меркантильные) – 70 %; не отставать от сокурсников (социальные, мотивы избегания неудачи) – 45 %; приобрести глубокие и прочные знания (учебно-познавательные) – 43 %; обеспечить успешность будущей профессиональной деятельности (профессиональные, достижение успеха, профессиональной самореализации) – 37 %; добиться одобрения родителей и окружающих (социальные, позиционные, мотивы престижа) – 35 %; достичь уважения преподавателей (социальные, позиционные, мотивы престижа) – 30 %, стать высококвалифицированным специалистом (профессиональные) – 29 %; не запускать изучение предметов учебного цикла (учебно-познавательные) – 27 %; успешно продолжить обучение на последующих курсах (учебно-познавательный) – 27 %; получить интеллектуальное удовлетворение (мотив самореализации) – 25 %. Наименее предпочитаемыми мотивами оказались: успешно учиться, сдавать экзамены на «хорошо» и «отлично» (мотив достижения) – 15 %; быть постоянно готовым к очередным занятиям (мотив обязанности) – 13 %; избежать осуждения и наказания за плохую учебу (мотив достижений, избегание неудач) – 13 %; выполнять педагогические требования (мотив достижений, обязанности) – 7 %; быть примером для сокурсников (социальные, позиционные мотивы, мотивы престижа) – 5 %. Анализ наиболее и наименее значимых мотивов позволяет сделать вывод о том, что для студентов наиболее приоритетными оказались мотивы прагматичного характера, избегания неудачи. Мотивы познавательные и профессиональные также являются важными, но не приоритетными. Интересным является факт попадания в наименее предпочитаемые мотивов достижения, а также достаточно низкий процент у большинства мотивов познавательного, профессионального характера и самореализации. Также вызывает беспокойство отсутствие желания большинства студентов быть примером, что является важным качеством для будущего воспитателя.

Анализ результатов беседы, направленной на выявление факторов, влияющих на мотивацию во время аудиторных занятий, дал следующие результаты. На вопрос «Что мешает вам учиться (негативно влияет на вашу учебу)?», были получены ответы: лишние предметы, не связанные с будущей профессией (85 %); несправедливость оценивания (65 %); непонимание преподавателей, их незаинтересованность (60 %), отсутствие своевременной поддержки преподавателя, что приводит к последующим

сложностям в обучении (30 %); скучные занятия (45 %); собственная лень (25 %). Сопоставив эти результаты с диагностикой, можно предположить, что желание получить диплом связано, скорее всего, с разочарованием студентов в процессе обучения, преподавателях и несправедливости оценивания (что влияет на получение стипендии, в том числе).

Какие формы работы аудиторной, домашней способствуют повышению желания учиться? Среди наиболее эффективных форм работы были названы: деловые игры (60 %), работа в парах (40 %), педагогическая практика (80 %). Наименее предпочитаемыми были названы лекции (20 %) и домашняя работа (10 %). Данные свидетельствуют о том, что преподаватели недостаточно используют активные методы обучения, систему взаимодействия между студентами, практические занятия носят в основном теоретизацию опыта, а не работу над формированием навыков будущей деятельности. Домашняя работа в основном не проверяется и не контролируется, что снижает мотивацию студентов к ее выполнению.

Наблюдение за взаимодействием студентов во время занятий показало наличие 3 групп студентов: первая группа (15 %) – стремящиеся к высоким результатам успеваемости, способные работать на частично-поисковом и творческом уровне, постоянно готовящиеся к занятиям, способные к рефлексии и мотивации своей деятельности, имеющие высокий уровень самостоятельности, пытающиеся заслужить одобрение преподавателя, соревнующиеся между собой за более высокие показатели результативности, способные работать в команде, но не желающие помогать другим. Вторая группа (53 %) – студенты, ориентированные на достаточные результаты обучения, работающие на репродуктивном и частично-поисковом уровне, выбирающие более простые способы решения задач при подготовке к занятиям, не всегда выполняющие домашние задания в надежде на то, что им повезет, и их не спросят, способные работать в большой команде (групповая работа их активизирует), характеризующиеся желанием помогать себе подобным по успеваемости. Третья группа студентов (32 %) не заинтересованы в процессе обучения, часто не подготовлены к занятиям, имеют достаточно низкий уровень сформированности общепознавательных умений и навыков, на занятиях абстрагируются от процесса обучения, нуждаются в постоянном контроле, поддержке и мотивации. Не всегда способны работать в группе из-за нехватки знаний. При работе со студентами более успевающими занимают позицию наблюдателя, не включаясь в работу.

Выявленные особенности позволяют констатировать, что современный процесс подготовки воспитателей не направлен на формирование интереса к получению знаний. Можно утверждать, что в системе обучения отсутствуют необходимые условия для формирования потребности в

теоретических знаниях и практических умениях и навыках. Преподаватели не всегда обосновывают важность предмета для профессиональной подготовки; не достаточно формируют интерес к определенной области знаний и данной дисциплины; низкое качество преподавания и незаинтересованность самих преподавателей способствуют снижению мотивации студентов; студентам не предоставляются варианты и возможности овладения материалом, дисциплиной, исходя из собственных способностей.

Внедрение в практику подготовки будущих воспитателей дифференцированного подхода (на примере курса «Дошкольная педагогика»)

Introduction of a differentiated approach to the practice of training future educators (on the example of the course "Pre-school pedagogy")

Главной целью дифференциации в обучении является определение наиболее рационального характера работы для каждого студента, опираясь на их индивидуальные особенности (Зюзина, 2010), а также предпочтения, способности, временные рамки.

Группировка дифференцированных заданий по курсу «Дошкольная педагогика» осуществлялась с учетом уровня сложности задач, заинтересованности студента своей будущей профессией, возможности выбора уровня задач и участия в групповом взаимодействии в зависимости от желания студента, возможности достичь и пережить ощущения (ситуацию) успеха от успешно выполненного задания.

Важным моментом внедрения дифференциации в процесс подготовки будущих воспитателей считаем обсуждение со студентами того, как они видят реализацию данного процесса, исходя из положения о рассмотрении личности студента центральной фигурой учебного процесса. Студентам было предложено вносить свои пожелания в рабочую программу курса, тематику вопросов лекционных и практических занятий. Также было учтено пожелание студентов о повышении уровня практической направленности выполняемых заданий, что позволяло в дальнейшем снять вопрос «Для чего мы это изучаем?».

Дифференциация обучения во время аудиторной и самостоятельной работы позволяет обеспечить усвоение всеми студентами образовательного контента, который содержит инвариантную (обязательную часть программного материала) (Зюзина, 2010) и вариативную часть, предполагающую усложнение заданий. Задания были разбиты на 3 уровня в зависимости от сложности, объема, самостоятельности при их

выполнении. В структуру инвариантной части заданий для самостоятельной работы обязательным элементом входила работа над опорными конспектами лекций, направленная на формирование теоретических понятий. Вариативная часть заданий предполагала усложнение этой работы в соответствии с выбранным уровнем заданий и предполагала работу с рекомендуемой обязательной литературой (задания уровня С – репродуктивный), дополнительной (уровень В – поисковый), поиск литературы, связанной с новейшими, инновационными исследованиями и практиками по данной теме (уровень А – эвристический, творческий). Исходя из того, что лекции проводились в виде «перевернутого класса», это давало возможность не останавливаться на понятиях, понятных студенту, а подробно раскрывать трудные для восприятия и понимания моменты темы, практические аспекты. После каждой лекции проводилось он-лайн анкетирование, помогающее преподавателю понять, какие аспекты темы были не до конца поняты студентом, чтобы скорректировать работу на практическом занятии. Вторая часть заданий была практического характера и также предполагала усложнение по уровням: для студентов, выбирающих задания уровня С, это подбор материалов для практической работы на занятии, уровня В – разработка недостающих элементов заданий, заданий по образцу; для уровня А – самостоятельное конструирование конспекта, разработка материалов для разных форм деятельности и активности дошкольников, родителей, составление тезисов по прочитанной литературе и т.д.

Дифференциация работы во время практических занятий осуществлялась исходя из выбранной студентами группы заданий, которые они выполняли при подготовке к практическому занятию. Практические занятия включали в себя решение задач разного уровня сложности, разработку практических способов реализации работы с детьми, апробацию и практическое проведение фрагментов работы с детьми и проходили в активной форме. Использовались такие методы, как мозговой штурм, ажурная пила, аквариум, деловые игры, конкурсы, проекты и т.д. Благодаря тому, что выполненная самостоятельная работа была показателем эффективности студентов на практических занятиях и служила основанием для оценки, это мотивировало их более тщательно готовиться к занятиям, объективно выбирать посильность заданий, ответственно относиться к работе (особенно студентов, которые надеялись, что их не спросят). Во время дифференциации во время практических занятий осуществлялось также объединение студентов из разных групп. Наиболее эффективно в работе себя показала модель объединения студентов из группы А с группой С и группы А с группой В. При этом следует отметить, что студенты группы А могут эффективно работать в соотношении 1 (2) к 3-4, 3 (4) к 3 (4) со

студентами группы С, в то время, как наилучшее соотношение студентов группы А со студентами группы В 1 к 3 (4). Наименьшая эффективность в группировании студентов группы В с группой С, так как обе группы нуждаются в разной постоянной консультативной помощи и направляемости. Студенты группы С достигали позитивных результатов обучения благодаря постоянной работе с преподавателем, созданию ситуаций успеха, поощрению, веры в их способности, что обуславливало их постепенный рост и переход на более высокий уровень.

Учебный материал дисциплины был структурирован по модулям. В конце каждого модуля студент должен был предоставить портфолио из выполненных заданий. При этом студент мог выбрать тот уровень заданий, который считал возможным выполнить к окончанию модуля, не ограничиваясь той группой, задания из которой он выполнял в качестве подготовки к аудиторным занятиям. Это способствовало более гибкому подходу в процессе оценивания студентов и мотивировало их освоить модуль на более высоком уровне сложности, чувству удовлетворения в процессе достижения лично определенных задач. Свободный выбор варианта заданий способствовал устранению психологического дискомфорта при переходе от более сложного варианта к более простому и наоборот, если студент испытывал трудности, нехватку времени на подготовку и т.д. Значительно возросло позитивное отношение студентов к учебе, поскольку выбор посильных и вариативных задач способствовал укреплению уверенности студентов в своих силах и повышал уровень доверия к преподавателю.

Выводы
Conclusions

Дифференциация обучения в процессе подготовки будущих воспитателей является эффективным средством обеспечения индивидуальной траектории обучения студентов, предусматривающим самостоятельный выбор способа и уровня усвоения учебного материала, предоставляющим возможность самосовершенствования, обеспечивающим оптимальный режим работы каждого студента, позволяющим оценить студента с учетом вложенных усилий в подготовку.

Проведенная работа позволяет констатировать, что дифференциация учебных материалов, предоставление студенту выбора сложности задания, установление конструктивной обратной связи являются составной частью мотивационной среды, обеспечивающей активную личностную позицию студента в процессе познавательной конструктивной деятельности, чувство

удовлетворения в процессе достижения лично определенных задач. Дифференцированное обучение по уровням усвоения создает условия для активного развития студентов, поскольку позволяет работать каждому в меру возможностей и желаний.

Повторное исследование особенностей мотивации студентов 2 курса (72 студента) факультета дошкольного образования с помощью методики изучения мотивов учебной деятельности (модификация А. А. Реана, В. А. Якунина) после проведенной работы дало следующие результаты: существенное повышение частоты выбора мотива приобрести глубокие и прочные знания – от 43 % до 63 %; быть постоянно готовым к очередным занятиям – от 13 % до 65 %; обеспечить успешность будущей профессиональной деятельности – от 37 % до 57 %; получить интеллектуальное удовлетворение – от 25 % до 50 %; быть примером для сокурсников – от 5 % до 25 %; стать высококвалифицированным специалистом – от 29 % до 50 %; не запускать изучение предметов учебного цикла – от 27 % до 35 %; успешно продолжить обучение на последующих курсах – от 27 % до 35 %; успешно учиться, сдавать экзамены на «хорошо» и «отлично» – от 15 % до 25 %. Менее существенные перемены в мотивации получить диплом – 75 % (при этом данный пункт у большинства перестал нести негативное отношение к обучению, что было выявлено во время беседы со студентами); постоянно получать стипендию – от 70 % до 45 %; не отставать от сокурсников – от 45 % до 30 %; добиться одобрения родителей и окружающих – от 35 % до 30 %; достичь уважения преподавателей – от 30 % до 33 %; выполнять педагогические требования – от 7 % до 15 %. Наименее предпочитаемыми мотивами оказались: избежать осуждения и наказания за плохую учебу – снижение количества выборов от 13 % до 10 %.

Автором экспериментально подтверждено, что внедрение в практику подготовки будущих воспитателей детских садов в условиях высшей школы дифференцированного подхода к разработке и реализации образовательного контента способствует повышению эффективности учебного процесса благодаря активизации познавательных, профессиональных, социальных и ценностных мотивов студентов, учета их индивидуальных склонностей и предпочтений.

Таким образом, процесс подготовки будущих воспитателей средствами дифференцированных заданий приобретает для них значимость, желание постигать основы профессии, учиться, взаимодействовать с ровесниками и преподавателем.

Summary

Changing the teacher-centered approach to a student-centered approach causes the educational paradigm to change from behaviorism to the philosophy and pedagogy of constructivism, considering the learning process as the student's designing his own system of representations, knowledge, experience, awareness of the importance of learning and his own responsibility for the process and his result, the ability to independently choose their own strategies, tools, pace, volume of educational material.

One of the characteristic features of the organization of the educational process, based on the constructivist approach, is the emphasis on activities, the differentiation of the materials used, the forms of instruction, and increasing the student's motivation for learning, since cognition is unthinkable without motivation and awareness of his goal. The quality, depth and awareness of the acquired knowledge, acquisition of practical skills in the sphere of future professional activity depends on how motivated the student is to learning, what the nature of these motives is. Undoubtedly, students with different motivations learn differently and prepare for classes, which affects the final result of the preparation. Meanwhile, high school teachers should take these features into account in the development of educational content, because not only the professional development of the future teacher is an important result of his training, but also how he will translate the knowledge / skills he / she has gained in working with children.

The articles's aim is to describe the features of introducing differentiated assignment for homework and classroom work and their impact on the activation of cognitive, social, professional, value motives of the training of future preschool teachers in the pedagogical process of the university. The analysis of scientific research in this area allows us to state that the differentiation of teaching materials, the provision of the student with the choice of the complexity of the assignment, the establishment of constructive feedback are an integral part of the motivational environment that should ensure the student's active personal position in the process of cognitive constructive activity (Jovanovic & Matejevic; Tohidi & Jabbari; Ryan & Deci; Rousseau & Bergeron et al.). Differentiation of training during the classroom allows to ensure the assimilation by all students of the educational content, which assumes an invariant (mandatory part of the program material) and an optional part that involves the complexity of assignments. The main goal of differentiation in teaching is to determine the most rational nature of the work for each student, relying on their individual characteristics, preferences, abilities, time frames. Thus, the training of future preschool teachers with the help of differentiated tasks becomes important for them, the desire to comprehend the foundations of the profession, to learn, to interact with peers and the teacher.

The author experimentally confirmed that the introduction of a differentiated approach to the development of content and its implementation in the practice of training future preschool teachers in higher school conditions contributes to improving the effectiveness of the educational process by activating cognitive, professional, social and value motivations of students, taking into account their individual inclinations and preferences.

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(RE)CONSTRUCTION OF STUDENT MUSIC TEACHER IDENTITY

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Abstract. *The professional identity of music teacher represents the essence of this profession. Improving the programmes of music teacher education and deciding how to (re)construct the professional identity of prospective music teachers, it is important to discuss what contextual factors can have an impact on the development of music teacher identity and what possibilities of its (self-) development are available at university. A better understanding of the role-identity of teachers at various stages of their careers could enhance the conceptions of study programmes in music teacher education. The article analyses and discusses the conception of music teacher identities, substantiates its peculiarities during pre-service training, points out the most important characteristics for the successful professional activity of the music teacher. The research presented in the article focuses on professional identity development of 30 university music students (15 Lithuanian and 15 foreign) at Lithuanian University of Educational Sciences (Music Education). The method of focus group interview was used in this study. The research results show that the student music teachers have developed a distinctive attitude towards the professional education in universities and their own expectations. Suggestions for practice and further research are also provided.*
Keywords: *professional identity, teacher education, student teachers, university education.*

Introduction

Globalization and technological advance have led to rapid recent changes in many people's lifestyles. Numerous studies have attempted to determine teachers' professional identity (Van Lankveld et al., 2017). Teacher identity, as a construct, has been used to represent multiple things. S. Beltman et al. (2015: p. 226) claim that understandings of identity from different conceptual frameworks have some common elements: identity is shaped by multiple personal and contextual factors; these factors interact in a reciprocal and dynamic way; and so identity is continually reshaped over the life of an individual. Other researchers (Holgersen, 2017; Zhao & Zhang, 2017) argue that teacher's professional identity is a key component of teacher professionalism and teaching philosophy, reflection and self-efficacy are important parts of professional identity. In general, the concept of identity has different meanings in literature sources.

Most of the researchers saw the professional identity as an ongoing process of integration of the "personal" and the "professional" sides of becoming and

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being a teacher. The identity question "Who am I?" is powerfully shaped by the contexts, relationships, and activities in which people are most deeply invested (Pillen et al., 2013). Building a professional teacher identity can be complex as pre-service teachers engage with a process informed by their previous experiences of teachers and teaching, by learning in their pre-service course, by field placements, and by societal expectations (Beltman et al., 2015). According to Mahsa Izadinia (2013: p. 695) understanding how the professional identity of pre-service teacher develops during the teacher education program will help teacher educators to better prepare pre-service teachers for the rigours of teaching and may shed light on how to engage in "a productive process of constructing their professional identities".

The identity of music teacher is one of the kinds of professional identities and, therefore, it is important to single out the specific peculiarities that are characteristic of professional activities of a music teacher. The music teacher should be a wide profile specialist, sophisticated in music pedagogy, psychology, aesthetics and philosophy of music education, who could meet the most different music needs of school. Such wide-ranging needs of school pose numerous problems in music teacher education and training: what a music teacher has to be able to do best? What should the professional identities of a music teacher be like? What are the specific characteristics of these identities in the context of music teacher education?

As David J. Hargreaves et al. (2007) suggest, music teachers' "identities inevitably determine how they project their own implicit views of the nature of music in school" (p. 666). Understanding the construction of music teacher identity may assist in developing effective teacher preparation and mentoring support for new teachers, and in turn, strengthening the professional teacher collective, increasing retention for music teachers, influencing school children, improving educational outcomes and quality of teaching. However, music teacher identity has been explored less frequently in the context of student music teachers (Bennet & Chong, 2017; Güsewell et al., 2016; Henry, 2015; Draves, 2014).

Problem statement. The professional identity of music teacher represents the essence of this profession. Improving the programmes of music teacher education and deciding how to (re)construct the professional identity of prospective music teachers, it is important to discuss what contextual factors can have an impact on the development of music teacher identity and what the possibilities of its (self-) development are available at university. A better understanding of the role-identity of teachers at various stages of their careers could enhance the conceptions of study programmes in music teacher education.

The **object of the research** is the development of the identity of student music teacher in music teacher education.

The **aim of the research** is to explore professional identities of prospective music teachers during pre-service training, and to highlight educational preconditions for their (self-) development.

The research was done applying several **methods of research:** analysis of scientific sources, focus group interview, qualitative content analysis**.**

Characteristics of pre-service music teacher identity

A great number and wide variety of research focusing on music teachers' professional identity has been carried out over the past years (McClellan, 2017). David J. Hargreaves et al. (2007) admitted that music teachers' identities inevitably determine how they project their own implicit views of the nature of music in school. According to Cynthia Wagoner (2012), music teacher identity is own conception of himself or herself as a music teacher, as affected by five facets: (a) music teacher self-efficacy; (b) music teacher commitment; (c) music teacher agency; (d) music teacher collectively; and (e) musician-teacher comprehensiveness (i.e., the broadness or narrowness with which one see's one's self as a musician and as a teacher).

A particular challenge to music teachers' identity construction lies in the articulation between the musician or interpreter identity and the music teacher identity. As Angelica Güsewell et al. (2016) outlines, professional music teacher education should lead students to reflect their professional identity, to combine their identity as an interpreter with their identity as a teacher, and to consider a multiple, evolving identity which aligns with the reality and the requirements of the field.

As a construct, music teacher identity has been used to represent multiple things. Many studies (Bennet & Chong, 2017; Garnett, 2014) have noted that professional identities of music teachers are consolidated within the pre-service music course, as music teachers, they are judged predominantly on their musical abilities. The musical practices create musical identities. For musicians, the musician identity is developed much earlier than that of a teacher identity, leaving pre-service music teachers to negotiate the musician-teacher identity much later than that of musician-performer. Conflicts between the musician-performer identity and the music teacher identity are suggested in many studies. Kristen Pellegrino (2015) noted that it is not clear, if the identity of music teacher-performer should be labelled conflicted or a fluid state dependent on individual, social, and cultural contexts.

As the literature review showed, there is no single fundamental idea what music teacher identity means and mostly it is viewed as a social construction. The recent research studies on music teacher identity emphasize that music teachers'

identity is influenced by personal, social and cognitive factors (Biasutti & Concina, 2017). Identity is therefore shaped by experience, training and context.

Music Teacher Education as Identity Construction

Daniel S. Isbell (2014) has noted that construction of pre-service music teacher's identity has been examined to better understand the socialization process and effective pedagogy concerning the pre-service teacher. Pre-service teachers, embodying specific identities, understandings, and early enactments of teaching, engage with the systems of teacher education to create a professional identity (Sexton, 2008). The teacher role is the set of understandings of what it means to be a teacher in a given context.

Many institutions provide undergraduate experience that can lead to professional certification to teach music. Each institution provides a unique socialization experience in the music teaching profession (Miksza & Berg, 2013). Current research on the construction of music teacher identity has struggled with finding professionally satisfying ways teacher educators might assist pre-service teacher in developing a teacher identity.

Susan Beltman et al. (2015) pointed out that identity is dynamic and during pre-service programs as they learn more and encounter different school practices in their placements, these visions of themselves as teachers could change. Patrick K. Freer (2012) has noted that the musical identity presents first and that it provides a framework for making relevant the pedagogical techniques and theoretical models encountered in education courses and initial fieldwork. Therefore, a strong musical identity may be indicative of a successful music teacher identity. In music education, learning to teach entails negotiating new meanings and reflecting upon past and present experiences to gain knowledge of (a) music, (b) teaching and learning, and (c) teaching and learning within music.

However it does validate the importance of developing professional identities in music teachers during their pre-service education. It is therefore seemed necessary to determine what the professional identities of music teachers are, in order for teacher education programs to reflect and address the emerging identities of early-career music teachers and move towards minimising "praxis shock" (Harlow & Cobb, 2014).

In Lithuania the qualification of a music teacher can be obtained at universities and music academies. The present study focuses on Lithuanian University of Educational Sciences. The study programme of *Music Education* differs from other study programs in its focus on deeper psychological-pedagogical training conditioned by the educational profile of the University. Today artistic, scientific and pedagogical subjects are equally included throughout the whole music teacher education. The scope of the Bachelor's degree

curriculum is 240 ECTS credits (it includes a module of pedagogical studies of 60 credits and a module of study subject of 90 credits).

On the other hand, present general requirements for structure of study programme development do not satisfy training of music teachers of broad profile. It is a real challenge to integrate study courses of music into strictly regulated number of study subjects within the study programme because the majority of music courses (such as piano, conducting, choir studio, singing) are of continuous nature and they require consistent studies, which embrace the whole period of university studies.

Therefore, deep knowledge of a subject and pedagogical psychological theories is not a reliable guarantee that the concepts and procedures necessary for the students will be efficiently introduced (Dobbs, 2014). For this reason, it is important not only to train specialists in music education but also to actualise the process of becoming a teacher as well as to focus on the process of teaching and subject didactics, to allocate more attention to reflective practice and ability to conduct research at school.

The experience of the author of the article and results of the conducted research revealed that the curriculum of music teacher education at higher education institutions of Lithuania is mostly predominated by "specialized training" of musicians (performers) (Lasauskiene, 2010). Another extreme is observed in other countries, when the content of subject teacher training is restricted on utilitarian basis ("a teacher has to know as much as it is necessary for teaching of learners"). Both extremes are not productive under contemporary conditions.

So without any doubt, the formation of the major identity in undergraduate music education is a primary factor in pre-service education of music teacher. However, there are many complexities involved in development of student teacher identity.

Student teachers' reflections on the teacher identities in music education

Participants. The purpose of this research was to explore how student music teachers, involved in the programme of music education at the Lithuanian University of Educational Sciences, perceived themselves as future music teachers. Two groups of students (15 Lithuanian and 15 foreign, Chinese students) participated in the research. Within the overall aim of the study, one of specific objectives is related to possible differences between the opinions of national and international students.

Understanding early pre-service teachers' emerging identity may enable teacher educators to prepare student teachers for their teaching career, through facilitating the development of a professional identity as teachers, and eventually

the development of effective teachers who thrive in the profession (Beltman et al., 2015). It has been argued that "clear self-image and ownership of an emerging professional identity" are necessary conditions that help pre-service teachers effectively apply knowledge acquired from teacher education programs into workplace situations in the future (Bennett, 2013: p. 55).

Data collection and data analysis

The method used in this study was the focus group interview since it not only enables the investigation of ideas expressed in the group, but also the interplay and dialogues within the members of the group (Parker & Powell, 2014). The focus group discussion may embrace a bigger number of informants' responses and reflect as broad as possible range of attitudes. Each participant was expected to express his or her personal opinion, and everyone was encouraged to take an active part in the interviews.

The focus group interview questions that relate to this article were as follows: 1) Who am I as a teacher? 2) How would you describe the future professional activity of a music teacher? 3) What feelings do you have towards music teaching? 4) What is the process of teacher identity formation like in music teacher education? The conversations were audio recorded, for which the participants' consent was obtained in advance, and later transcribed. The qualitative data analysis was carried out employing content analysis (Zydziunaite & Sabaliauskas, 2017). The approach used in this research relays on an existing theoretical model of music teachers' role identities designed by the author of the article (Lasauskiene, 2010).

Results and discussion

Identities of music teacher acquire specific features both due to specifics of artistic expression and their links with educational activities. They predetermine peculiarities of (self-) development of professional identity. The activity of a teacher-musician is successful, when his/her turns for music and educational activities are closely interrelated. However, a musician can be a perfect performer (a singer, a piano player, a conductor) but not a good teacher.

When describing their feelings towards their professional activity, the majority of student music teachers tended to categorise themselves as teacher-musician (performer), teacher-educator, teacher-researcher and teacher-manager. Table 1 summarizes the results of the focus group interviews.

Table 1 **The identities of teacher's role according to student music teachers' responses**

Category	Sub-category
Teacher-musician	- Development of musical abilities, performer skills - Participation in musical and artistic activities - Personal (self-) development
Teacher-educator	- Management of the teaching and learning process - Didactic (educational) competence - Positive personal features
Teacher-researcher	- Performance music education research - Reflection of educational practice - Participation in research projects
Teacher-manager	- Organisation of musical and artistic activities - Management of non-formal music education

Lithuanian and foreign students expressed diverse evaluations of the identities of music teachers: some are seen in a more favourable light, others are given less favourable assessment. Many student music teachers have a perception of themselves primarily as **musicians**:

> *"I especially like to sing <...> music teacher is the spirit of cultural life at school. It's a person without whom there wouldn't be any concerts or celebrations at school and in the town"* [a Lithuanian student].

Participation in musical and artistic activities plays a specific role in the spread of professional identity of a music teacher. Although most student music teachers in this study indicated importance of **participation in musical and artistic activities**:

> *"I think one of the most effective ways to test the overall strength of the music teachers and performers is to take part in concert<...>. If the ability is fully expressed, it will have a very deep understanding of your own singing or playing, it has a vital role in your professional identity"* [a Chinese student].

The activity of music teacher goes broad and includes a big number of various functions (Gapsytė & Bankauskiene, 2016). Music teacher of general education school participates not only in classroom activities but also organises music activities in school community and are heads of non-formal music education circles. A music teacher analyses environment of music and cultural life in school, continuously improves professional knowledge and style of own activities, participates in public cultural life.

Managerial skills of a music teacher are related to public, cultural, artistic expression, promotion of arts, organisation of musical activities and participation in them (ability to bring together learners of different needs for joint musical artistic activity, to organise individual and collective music performance: to lead choirs, orchestras, vocal and instrumental ensembles, to train solo performer) and in creative projects. Students related the expression of **managerial skills** of the

music teacher more to management of the non-formal teaching and learning process:

> *"It's important to take up activities in non-formal education (choirs, ensembles, bands), to organize various music events at school and in the town"* [a Lithuanian student];
>
> *"A music teacher at school, in my opinion, is a person who is active not only musically but also socially"* [a Chinese student].

Student music teachers discussed the importance of teaching experiences in their development as **music teachers**:

> *"Nowadays it's not very easy to be a music teacher, because you are giving the information about historical times and also music which is not heard every day to children<…>"* [a Chinese student];
>
> *"It is important that learners loved music. Learners should be given more creative tasks. New educational theories and methods should be applied. Music teacher should be creative. It is important to love your work"* [a Lithuanian student].

Teacher education should become a research object. The goal of research-based teacher education for future music teachers is to impart reflective teaching which will help the new teachers solve problems with which they may be faced in practice, through autonomous thinking and logical argumentation (Holgersen, 2017). It is possible to state that student music teachers assign priority to the **teacher-researcher.** This student music teacher comments as follows:

> *"Music teachers have to analyse music and pedagogical activities, to improve their personal qualities as well as to conduct research on school students' learning needs and outcomes, changes in school, innovations implemented at school. A music teacher has to improve own knowledge and to search for music innovations to be used in lessons"* [a Lithuanian student];
>
> *"Research activities help a music teacher improve own abilities and to successfully apply knowledge during lessons of music. When a student conducts scientific research, s/he learns and analyses own musical and pedagogical activities"* [a Chinese student].

Summarizing of the results of content analysis reveals that the students' views on the teacher identities in music education are homogeneous. Lastly, the importance of the role of a teacher in a contemporary school is linked to huge responsibility and nurturance of new roles and competences. It is not enough anymore for a teacher in a contemporary school to know his/her subject well. They have to possess a range of knowledge (academic, subject-specific, pedagogical, social and cultural), to be able to use it and to professionally solve problems. A contemporary teacher, if s/he is a good one, is not put into any frames but s/he exceeds them (Duobliene, 2011). As it can be seen from the research on the good experience accumulated in foreign schools, success of schools is frequently related to the fact that teachers surpassing all the expectation work in

them. They are exceptional, thinking in an innovative way, experimenting, ready to assume responsibility when they are not expected to. She or he is a talented teacher, who follows his/her vocation, an excellent specialist in the subject and able to discuss own subject in all respects.

Moreover, by developing a vision of what music teachers do, what good music teaching is, and what the goals of music teaching should be like, student music teachers begin to build their identity (Thorgersen et al., 2016). A practical implication could be to introduce the identity of a student music teacher as a functional concept among educators in music teacher preparation. The research opens the way for prospective initiatives of the (re)construction of music teacher identity and establishes the guidelines for further research.

Conclusions

1. At present the role of music teacher has been changing: s/he becoming a creative educator, musician, manager and researcher. This gives the grounds to re-think the scheme of the professional identity of student music teachers during their pre-service training. Development of music teacher professional identity acquires specific features both due to peculiarities of artistic expression and their links with pedagogical, managerial and research activities.
2. In this study student music teachers describe their professional activities as broad and multidimensional ones but they also emphasise the importance of development of musical, educational, managerial and research identities. Participation in musical and artistic activities plays a specific role in the spread of professional identity of a music teacher.
3. The results indicate that the views of student music teachers on music teacher identity have similarities. The Lithuanian student music teachers related the expression of professional identity of the music teacher more to educational and research identities management. The Chinese students linked the expression of professional identity of the music teacher more with musical and managerial identities. A significant implication for higher education schools (universities) is that studies in music teacher education can greatly enhance student capabilities on a wide range of music teacher identities.

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SOCIAL CONSTRUCTION OF KNOWLEDGE IN FUTURE TEACHERS IN PROBLEM-BASED LEARNING TEAMS

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Abstract. *The transformation in teacher training today is a widely analysed issue in the field of higher education. The search for educational strategies allowing to develop competences important to a future teacher, to be constantly learning, to be able to collaborate in a team, to analyse and solve authentic problems, to construct one's knowledge is gaining bigger and bigger relevance. It has been noticed that problem-based learning is one of attractive strategies responding to many challenges that higher education studies of today are facing.*
The aim of the present research is to reveal the opportunities and experiences of social construction of knowledge in future teachers in problem-based learning teams.
The problem question is how do future teachers socially construct knowledge in problem-based learning teams?
The methods of the analysis of scientific literature and interview have been used. Using the method of the analysis of scientific literature, the importance of social construction of knowledge in teacher training and opportunities for activity of future teachers in terms of knowledge construction in problem-based learning teams have been revealed. Interview with future teachers has highlighted students' various experiences in problem-based learning teams. There future teachers were learning to critically evaluate their own and their colleagues' ideas from various aspects. The development of the abilities to analyse and solve authentic problem-based situations the teachers will face in future every day has been emphasized. The dynamics of teamwork manifesting itself in problem-based learning has allowed future teachers to reflect on the progress of their knowing how to learn and share.
Keywords: *future teachers, problem-based learning, social construction of knowledge.*

Introduction

Future teachers' teaching and learning have recently been raising numerous discussions among both the theorists and practitioners of the science of education. Teachers trained using conventional approaches have been observed to experience considerable challenges in application of innovations in their work after completion of the degree. One of today's students' key competences is collaborative problem-solving (Pisa 2015 Collaborative Problem-Solving Framework, 2017). This competence should be emphasized as early as the period of training of future teachers in order to educate the students capable of

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demonstrating this competence. In light of changing roles of teachers, information transfer to students has been pushed to the background by the competence of creating appropriate conditions for team-work, being considerate of each member's particular aspects, and constructing knowledge at the same time, the role of which has been growing lately.

Social construction of knowledge is often related to the science of sociology (Berger & Luckmann, 1966). Nonetheless, it has been gradually gaining importance in education as well. In the context of learning paradigm, the emphasis has been placed on learners' active approach, which is inherent to their initiative of self-construction of knowledge. Training of future teachers is the most successful, where the students become involved in a certain situation by analysing it and constructing its meanings at the same time. University didactics has changed since the constructivist approach asserting that knowledge is constructed in the process of human interaction with the world has become mainstream (Gordon, 2009).

In view of the constructivist principles, training of future teachers should focus more on analysis of the authentic educational context. Students become the subjects who actively construct knowledge, rather than mere objects taking in the information transferred. These and similar priorities of the university didactics are emphasized by problem-based learning – one of the educational strategies which has found increasingly wider application in terms of university studies. Originating from medical studies (Barrows & Tamblyn), this approach has been widely analysed in teacher training context as well (Baysal, 2017; Barron & Wells, 2013).

Future teachers studying under the problem-based learning approach analyse and deal with authentic teaching and learning issues they are to address during their actual professional activity. Specifics of the teacher's profession implies than a teacher faces unexpected situations almost all the time and should be prepared to find a working solution. Another important aspect of teacher's activity is the ability to work in a collaborating team. This is yet another key elements of problem-based learning, for authentic issues are multi-dimensional and urge for an integrated approach, which can be provided only by a team comprised of different individuals joining their efforts.

Research object – future teachers' social construction of knowledge in problem-based learning teams.

The aim of the research is to reveal the opportunities and experiences of social construction of knowledge in future teachers in problem-based learning teams.

The methods of the analysis of scientific literature and interview with future teachers.

Future teachers' social construction of knowledge

Teacher's competences are inseparable from communication and collaboration skills, team mobilisation (Švietimo ir ugdymo studijų krypčių grupės aprašas, 2015). University training of teachers that would be prepared for professional practice full of challenges requires providing conditions for them to analyse and deal with authentic problems in collaborating teams, actualising own experience, enriching it by building on the colleagues' experience, thus engaging in social construction of knowledge.

University didactics is closely related to the theories behind the teaching and learning process. Constructivism is currently one of the most frequently referred to theories underlying education (Krahenbuhl, 2016). Despite its different varieties, it essentially emphasizes the idea that knowledge is constructed in the process of interaction with the world (Gordon, 2009). When building on the constructivist principles in future teachers' learning, their active approach, advocating own ideas, sharing the knowledge held, and creation of new knowledge, thereby addressing authentic problems emerging in teacher's professional activity, become important.

Knowledge is traditionally associated with revelation of a truth existing on a certain objective basis. The advocates of constructivism, however, emphasize the idea that there is no knowledge beyond an individual (Gordon, 2009). Absolutist approach towards individual knowledge could also be recognized as being limited. Under the individualist epistemology (the theory of cognition), conveying as much knowledge as possible to an individual and expanding his thinking abilities are the most important. The theory and practice of education have been centred on an individual and his/her cognition as an individual process for a long time. Such an approach is questionable as it demonstrates only one side of the opportunity for learning, limited by a single individual's knowledge and understanding, leading to isolation or competition rather than promoting collaboration (see Foucault, 1975).

The idea of a subject of active cognition, as emphasized by the constructivist theory, implies the education practices enabling learners to actively participate in the social environment, thereby constructing knowledge, rather than listen to the teacher while remaining in a passive position. S. Brinkmann & L. Tanggaard (2010) have referred to the theory of cognition that is based on pragmatic constructivism and emphasizes learners' active engagement by employing the metaphor of "epistemology of the hand". The metaphor emphasizes that learners have the possibilities to be active and act in a constructive way, "using own hands" in the process of their studies.

In the practice of education, it is important to note that social construction of knowledge can be used as a model alternative to individualist epistemology.

Authors supporting the idea of social construction of knowledge (Berger & Luckmann, 1966; Gergen, 1999) emphasize that knowledge is a product of not only individual cognitive, but also social process. Every learner lives in a certain socio-cultural context, his/her living world acts on his/her knowledge. This validates the importance of sharing knowledge and social construction of its new meanings.

Social construction of knowledge may cause a number of challenges to the process of learning by future teachers. These, however, are the challenges that should be overcome before one engages in teacher's professional practice. Learners supporting the idea of individualist epistemology, showing tendency towards collection and demonstration rather than sharing of knowledge may find this particularly challenging. One of the educational strategies closely related to social construction of knowledge is problem-based learning. In problem-based learning, considerable focus is placed on the learners' team work, provoking the processes of social construction of knowledge.

Future teachers' activity in problem-based learning teams

Majority of the authors emphasize that problem-based learning is the method that helps avoid limitations of traditional teaching and learning, train students capable of engaging successfully in practice (Blackbourn et al., 2011). Problem-based learning enables future teachers to acquire currently relevant competences, such as collaborative problem solving in teams. It is also important that future teachers acquire these competences in view of their professional activity in order to be able to successfully mobilise student teams for cooperation, motivate the teams properly for solution of authentic problems, and social construction of knowledge.

Team work is an inseparable part of problem-based learning (Azer, 2008). It usually takes place throughout the learning process in parallel to individual work. The team mobilises for the first discussion as soon as it is presented with (or the team identifies by themselves) an authentic problem situation requiring analysis and different approaches and not having a single clear solution. Team members define each other's roles and assign the questions to be addressed by self-study. Team members meet on a regular basis for sharing the knowledge accumulated by each member and holding joint discussion on the problem addressed. If they succeed, the team work may become a great strategy for the future teachers to perform social construction of knowledge, deal with the problems to be encountered in their future practice.

In the team work, tutor's function of the facilitator implies students' activity being their responsibility. It should be noted, however, that the process may become uncontrollable, when certain students do not perform the tasks

delegated to them with due responsibility. This may harm both the team atmosphere and the expected outcome. It is very important that future teachers receive facilitator's adequate assistance in their team work and are provided with proper conditions for development of their team work skills, acquisition of the required knowledge on the team development dynamics. Mere subject-related knowledge directed towards problem solving is not sufficient for future teachers' social construction of knowledge.

Knowledge sharing and construction are the most successful in the teams comprised of students holding different experience and different approaches. The differences in their experience become even more evident as they actively study different sources, perform different roles in the team, collaborate with different people who are able to provide valuable input into analysis of the problem addressed. It is not only the cognitive, but also emotional aspect that becomes an important prerequisite for social construction of knowledge in a problem-based learning team. During discussions on solution of authentic problems, learners become even more involved into the study processes and subjects dealt with, the problems become relevant to them personally, and a solution that is better thought through and applicable to real life is adopted.

By working in teams, future teachers acquire a lot of important competences, develop the principles that are important for social construction of knowledge. Following their empirical research works focusing on future teachers who studied under the problem-based learning approach, R. Murray-Harvey et al. (2013) have identified their collaborative learning. This kind of learning manifests itself in such principles as openness to other people's views, recognition of a contrasting opinion and perspective, demonstration of humility in view of the common goal. Strong emphasis is also placed on the abilities which have become evident in problem-based learning team work, for example, positive sharing and collaboration, working as a group for finding a solution to a problem, critical thinking in solving a problem, sharing roles and responsibilities, dealing with conflicts, etc. In construction of new knowledge, different ideas and concepts are analysed, theory is linked to real life. Problem-based learning enables future teachers to learn a lot about team dynamics, understand how to form groups, include all learners into joint work, etc.

Research methodology

Problem-based learning has been practiced at Šiauliai University since 2012, starting with implementation of project *Upgrading of Study Programmes by Introduction of the Problem-Based Learning Method*. Several study programmes were upgraded on the institutional level, and certain teachers have been practicing problem-based learning in their study subjects until present. The

article analyses the study results generated by student (future teacher) interview surveys conducted in January 2018 upon completion of the course that predominantly applied problem-based learning as the method of teaching and learning.

A problem related to preventive teaching has proposed to students under the course framework. By socially constructing knowledge, future pedagogues attempted to find the technique of preventive activity, which would help prevent problems that usually emerge among pupils. By working in teams, students identified the main problem, identified the attractive form – film watching – for pupils, developed an engaging teaching aid for the film analysis in line with the topic of pedagogical prevention. Future teachers worked as a team, but split the questions among themselves, and each member acted as an expert in a certain area and presented the respective material accumulated by them to the team during the meetings for further joint analysis of the problem and development of the final product. The tutor acted as a facilitator who helped the students, where appropriate, thus promoting their learning process by means of brief consultation.

During analysis of the scientific literature, communication with the students working under the problem-based learning method, the team work has been noticed to raise a number of different challenges. Nonetheless, it offers considerable benefit as well. In view of the importance of collaboration for the future teachers, they were asked to reflect on their experiences gained during work in the problem-based learning teams in the end of the course.

Analysis of future teachers' experiences in problem-based learning teams

Future teachers who worked in problem-based learning teams identified a great deal of experience related to social construction of knowledge and thinking progress. Their answers grouped into categories and sub-categories have been illustrated with the statements and presented in Table 1.

Future teachers note that collaborative culture is developed in problem-based learning teams. Other authors have also drawn attention to expression of collaborator's learning in problem-based learning teams (e.g., R. Murray-Harvey et al., 2013). In the study conducted, a variety of statements characterising collaborative culture in the course of social construction of knowledge have been identified. Future teachers noted the diversity of insights, experiences that has become evident in the team. The informants have referred to this diversity as a positive aspect that promotes tolerance, search for compromise, listening to each other. Mutual help in the team and favourable conditions to learn from each other have been noticed.

Table 1 **Future teachers' experience of knowledge construction in problem-based learning teams**

Category	Sub-category	Illustrative statements
Experience of knowledge construction	Collaboration culture	To listen to each other carefully
		To tolerate others' opinions, work methods
		To learn from each other
		To look for a compromise
		To share insights, experience
		To observe how we can assist each other
		To split duties
		To have the sense of responsibility for own work and team
		To provide proposals without harming warm working climate in the group
		To generate ideas, turn them into shared output
		The roles assumed become evident during the work: generator of ideas, executor, critic, etc.
		We are interested in encouraging others; unfortunately, we sometimes fail
		Encouragement, praise by the team members help very much
	Expression of critical, creative thinking	To look at own thoughts, knowledge critically
		To better learn about oneself and other person
		A lot can be seen through other people's eyes, from different perspectives
		Better work can be achieved in a team, while individual work produces poorer results, not exceeding one's capacities
		Enables creative thinking

The study has revealed that each member of the problem-based learning team assumes certain role, thus complementing others. Splitting duties enables integrating own contribution into joint effort. Construction of knowledge in a team also emphasizes the importance of both individual and team work; however, team interests should be treated as more important than the personal ones. The informants emphasize the responsibility for the both areas of activity. Nonetheless, the priority of team work becomes evident, as individual ideas are generated with the aim to contribute to the joint goal, without affecting positive team micro-climate.

The students are interested in success of their team, and not only put more own effort, but are also inclined to encourage others. Good result can be achieved by work of a problem-based learning team only if everyone works together, as authentic problems demand multi-dimensional consideration of a

solution. Several informants have noted that they are positively influenced by encouragement from other informants. However, there also are those who have faced the cases, where motivation of other team members sometimes fails. Hence, future teachers face the situation where people with different motivation operate in a team, and ways for promotion of their motivation need to be found.

It has been noted in the scientific literature that activity in problem-based learning teams promotes development of higher-order thinking (Raiyn & Tilchin, 2015). During the study, emphasis on creative and critical thinking has become particularly evident. New knowledge is constructed not only in view of the problem analysed, but also in view of oneself as well as others. Other people's perspective shows multi-dimensionality of views, enables critical assessment of own knowledge and ideas. The multi-dimensionality of views in a team allows to avoid limitations created by one person's capacities when addressing and solving a problem.

During the study, the students revealed that, in the course of social construction of knowledge in teams, they developed positive principles in terms of team work, leant certain roles important for teaching practice (Table 2).

Table 2 **Teachers' roles learnt in teams**

Category	Sub-category	Illustrative statements
Teachers' role	Teacher – team facilitator	It is important that a teacher considers the persons comprising the team
		It is best to teach/learn social skills in a team
		We learnt by observation of the work and making input where necessary
	Teacher – learner	Team work is encountered in professional practice, and it is important to learn it
		Team work is very important in a learning process
	Teacher – leader	It is important to empower the team for active performance
		To defend own opinion
		To notice other person's strong sides and make use of them
	Teacher – problem solver	I learn to overcome difficulties in various situations
		I think what to do for the team to perform better

By working in a team, future pedagogues – in terms of meta-learning – gain competences in team mobilisation, develop positive view towards team work by emphasizing that it helps develop social skills. The students encounter a variety of different experiences and opinions, and reflect on this experience by stating that it is important to account for all the team members, maintain control over the team work, but, at the same time, make sure that conditions for work

under own techniques and at own pace are provided, while assistance is provided only if necessary. Hence, the future teachers note the ways to facilitate the learners' team for it to develop in an appropriate direction and for natural learning process to take place.

Teachers' main practice covers work with different people, collaboration. Preparation for such practice can start as early as during the degree studies, when the students are provided with the conditions to learn by working in a team, thus gaining knowledge about the team itself, its development, and realising the benefit provided by team work.

Teachers' leadership is a recently topical subject, discussed by emphasizing that, educational leadership of school principals is being replaced by shared leadership of all teachers, which is manifested in assumption of responsibility, empowerment of other people for activity, advocating of own opinion in the search for a compromise, etc. (Mokytojų lyderystė ir jos sąsajos su švietimo kokybe, 2015). Students note teacher's practice as of a leader, emphasize learners' cognition and identification of their strengths in the team work.

Problem analysis and solving is one of the key aspects of problem-based learning. Future teachers learn by solving problems that are similar to those they are to encounter in their professional practice. The students have also noted that the problem-based learning process itself, and, in particular, team work become a considerable challenge that is to be addressed. Hence, in the course of problem-based learning, students construct their knowledge not only in view of the problem addressed, but also in view of the team work, its principles and possibilities for improvement, which is particularly relevant for the future teachers who intend to apply this learning strategy in their professional practice.

Conclusions

One of the recently most frequently referred to theories underlying education is constructivism. Social construction of knowledge that emphasizes active approach to learners' cognition is closely related to constructivism. In the process of future teachers' learning, social construction of knowledge is recognized as a more appropriate alternative compared to the individualist epistemology. The latter is limited by human experience and view. Social construction of knowledge enables enriching one person's experience emerging from his/her living world with another person's unique experience, thus constructing new knowledge.

The process of social construction of knowledge manifests itself actively in student problem-based learning teams. At this point, they develop their experience by collaborating with each other, analyse and address authentic problems pertaining to their profession together. It is important that future

teachers gain as much diverse experience by themselves in team work as possible in order to later be able to succeed in becoming assistants to teams of their pupils.

During the study, future teachers were found to place considerable focus on collaborative culture during social construction of knowledge in problem-based learning teams. Collaborative culture manifests itself in listening to each other, search for a compromise, tolerance of otherness, sharing insights, assisting and encouraging each other for the sake of shared output. In the course of team work, future teachers expand and update their knowledge related not only to the problem analysed, but also to themselves and other team members. By being in a team, students learn to perform different roles, develop higher-order thinking, in particular, critical and creative thinking.

Future teachers have noted that participation in problem-based learning teams has enabled them to try out the roles that are important for their future professional practice. Diversity of teacher's roles has been revealed: teacher is the facilitator of the learners' team, continuously learning himself/herself, capable of demonstrating leadership skills, reflecting on and addressing problems (both pertaining to the area analysed and arising in the team activity).

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TEACHING ENTREPRENEURSHIP THROUGH A CLIL APPROACH IN RUSSIAN TECHNICAL UNIVERSITIES

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Abstract. *In recent decades, increasing numbers of EMI (English as Medium of Instructions) courses have been added to university course offerings in countries where English is not the first language, as a way of supporting university internalization and addressing the global status of English. However, some studies argue that EMI courses might affect the overall learning of course content because of students' poor lecture comprehension and passive engagement in class. In order to facilitate student engagement and improve learning experiences in EMI courses, the authors introduce a CLIL approach that would facilitate students' overall learning in entrepreneurship. By focusing rather on the content, students acquire the target language unconsciously. Learning a language through content does not only increase the students' motivation but it also improves the students' performances, both in language and content. This article demonstrates the possibility of combining the subject Entrepreneurial Leadership and CIL, and it intends to explore possible benefits and obstructions. During the research it became evident that the students' interest in Entrepreneurial Leadership which was realized in the frame of Masters' Programme "Entrepreneurs for Tomorrow" as well as their concentration increased, mainly due to the use of different teaching techniques employed and partly due to use of English as the language of instruction. Further issues raised in the field of CLIL Entrepreneurial Leadership will be discussed in the empirical part and in the curriculum analysis.*
Keywords: *EMI (English as Medium of Instructions), CLIL, entrepreneurship, Entrepreneurial Leadership, teaching techniques, Masters' Programme "Entrepreneurs for Tomorrow".*

Introduction

Higher education is facing unprecedented challenges in the definition of its purpose, role, organisation and scope in society and economy. The information and communication technology revolution, the emergence of the knowledge economy and consequent funding conditions have all thrown new light and new demands on higher education systems across the world. To score highly, a university should have a working mission statement with an entrepreneurial vision for the future of the institution. The entrepreneurial strategy of a university could

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have specific objectives for entrepreneurship with associated performance indicators such as generating entrepreneurial motivation, cognition, and attitudes; generating entrepreneurial competences and skills; support business start-ups; commercialise research results through technology transfers and business start-ups; generate revenues for the institution from spin-off activities; strengthen co-operation between the institution and local firms and etc.

National Centre for Entrepreneurship in Education presented more detailed key over-riding activities of the university developing of which can help to enhance institutional enterprise and entrepreneurship opportunity (Gibb et al., 2013). They are: 1. Mission, Governance and Strategy (Mission and Strategy, Governance, Organisation Design, Knowledge Organisation, Measuring Excellence and Public Value, Leveraging Public Finance); 2. Stakeholder Engagement (Regional and Local Partnerships, Business Partnerships, Engaging Entrepreneurs, Alumni Engagement, Social Enterprise, Student Ownership); 3. Entrepreneurship Education (Exploring the Potential, Linking to University Goals, Organising and Locating the Effort, Pedagogy and Staff, Development, Cross Campus Initiatives, Supporting Students Initiatives); 4. Internationalisation (Sharing Culture, Staff and Student Mobility, Partnership and Network Building, Overseas Campus Development, Organising to Build Commitment); 5. Knowledge Transfer, Exchange and Support (Knowledge Transfer, IP Policies, Spin offs, Incubators, Science Park Engagement, Loan and Equity Finance, Academic Entrepreneurship).

In our article we are focusing on two activities which have become embedded in the project “Entrepreneurs for Tomorrow” (E4T), these are Entrepreneurship Education and Internationalisation. This project is an attempt to develop entrepreneurial skills in graduates in the frame of international dimension. In the Volga region of Russia the teaching of entrepreneurship is not yet sufficiently integrated in higher education institutions' curricula. Available data show that the majority of entrepreneurship courses are offered in business and economic studies. Usually non-business and technical studies include macro- and microeconomics courses. Sometimes, in addition, general courses are offered on accounting and innovation. However, courses genuinely targeting entrepreneurship and business (start-up, business plan, etc) are lacking in almost all universities in the Samara Region and all curricula. Where such courses do exist, they are usually of low quality since most faculty members do not have the requisite practical experience and qualifications. The other issue which we will highlight in our article is Internationalization through implementing a CLIL approach while studying subjects on Entrepreneurship in English

International Dimension of Entrepreneurship in Russian Technical Universities

The project "Entrepreneurs for Tomorrow" (E4T) aims to establish a new Master programme for Sustainable Entrepreneurship in the Volga Region (Russian Federation). The programme E4T has been already running for three years in three main cities in the Volga Basin (Nizhniy Novgorod, Samara and Saransk). Its main objective is to contribute significantly to a sustainable economic development of this region at grassroots level with an important emphasis on sustainable development (people-planet-profit). The students who are involved into the programme have to develop essential skills how to set up a new company or how to work successfully in the growing number of Small-and-Medium Enterprises (SMEs) in the region (Application Form TEMPUS IV, 2013).

E4T provides a two-year master's degree programme in entrepreneurship that combines theory and practice. E4T students are given the opportunity to commercialise their own or other people's technology-based business ideas. Groups of two to four students from different technological backgrounds work together in a team. E4T gives students the opportunity to create their own workplace and approximately 1/3 of the students continue in their own enterprise after finishing their studies. The students of two first intakes had an optional stay at Zuyd University of Applied Sciences in the summer semester between years 1 and 2, where they were able to test start-up projects in an international business environment. The third intake of students have an opportunity to study in Zuyd for three months in the frame of the Erasmus+ Credit Mobility. The Erasmus+ Credit Mobility inherits TEMPUS IV "Entrepreneurs for tomorrow" project implemented by partners during the period 2013-2017 and supports international perspective of master degree program and achieves planned learning outcomes.

Development of academic mobility is an over-riding part of internationalisation strategies of all three Russian partner Universities – Ogarev Mordovia State University, Samara State Technical University, Nizhniy Novgorod State University of Architecture and Civil Engineering. It serves as a flexible tool to support "student-centered approach" because it allows students to choose an individual study track, develop communication, intercultural and language skills, improve their employability and career opportunities. Outcoming and incoming academic mobility helps to create vibrant multicultural environment, make Universities visible on international arena and attract best students. Bilateral academic mobility programmes strengthen trust and mutual understanding with international partners and lay foundation to further cooperation in teaching and research.

The key part of the Master's program for each student is the chance to introduce his or her business idea to the real market and the practical work on creation new start-up company on the business-incubator basis under supervise of well-experienced Russian and European teachers.

This programme makes profits not only for students but for Universities as well. The programme E4T helped Universities:

- to make a clear distinction in the curriculum between courses about entrepreneurship (basically the current course) and courses for entrepreneurship, which are meant to support students to become entrepreneurs;
- to design courses for entrepreneurship that are: 1) practical in content, away from the current theoretical orientation; 2) practical in delivery; 3) involving entrepreneurs in the delivery, and 4) are offering facilities where entrepreneurial issues are practiced;
- to start offering entrepreneurship courses for all students of all departments starting from first years to graduates, and give higher formal and informal status to these courses.

Entrepreneurial Leadership was one of the courses taught at Samara State Technical University in the frame of E4T programme. Highlighting the importance of Entrepreneurship and Leadership, in the last twenty years Entrepreneurship and Leadership arose not as two different perspectives anymore, but as an integrated new perspective; Entrepreneurial Leadership (Reich, 1997). Kuratko (2007) argues the importance of Entrepreneurial Leadership. "Entrepreneurial leadership is necessary for firms of all sizes in order to prosper and flourish". The challenge for leaders is to create an internal entrepreneurship as an integrated concept that encourages individuals in an innovative manner. It is this perspective that has revolutionized the way business is conducted at every level and in every country. It is a perspective that stimulates individuals to find the innovative spirit.

We believe that this course is very useful in developing entrepreneurial mindset in students and teachers and will help to realize the entrepreneurial vision of the university future.

Pedagogical Challenges and Adjustments of CLIL

One more point which we would like to highlight in our article is the role of the English language in mastering E4T programme. To finish this programme successfully, students had to have level of English not less than B+. At the beginning of the project only 60 % of students met the requirements. That explains that the current situation in Russia is described English as a Foreign Language

case where English has had no official or social status historically. According to a recent British Council report (Dearden, 2014), English as a Medium of Instruction (EMI), by which so-called content subjects are taught in English in settings where it is not the national or official language, is a burgeoning global phenomenon. On the strength of several findings, Dearden characterizes this trend as an outright "shift from English being taught as a foreign language (EFL) to English being the medium of instruction (EMI) for academic subjects such as science, mathematics, geography and medicine" (Dearden, 2014). That is why different methodologies of foreign language teaching are being tested and borrowed across the world. One of the most popular methodologies of recent years is Content Language Integrated Learning (CLIL). CLIL methodology was applied in Spain, Germany, Sweden, Finland, Czech Republic, Austria and other countries.

Content and Language Integrated Learning (CLIL) is a term describing both learning any subject (content) through the medium of a foreign language and learning a foreign language by studying a content-based subject. E. Harrop mentioned that the acronym CLIL has appeared in Europe in the early nineties "to any dual-focused type of provision in which a second language, foreign or other, is used for the teaching and learning of a non-language subject matter, with language and content having a joint and mutually beneficial role" (Harrop, 2012). The integration of language and content teaching is perceived by the European Commission as "an excellent way of making progress in a foreign language" (Commission of the European Communities …, 2004-2006).

CLIL (content and language integrated learning) is rather new for Russian educational tradition. We don't still have real multinational students groups this approach was developed for. The most recent examples of using CLIL in Russian high schools are those of using "Soft" CLIL. Unlike "Hard" CLIL, where content is given primary focus and the learning objectives are defined as subjects, concepts and skills. "Soft" CLIL is aimed at language learning.

The CLIL teacher has to keep in mind that students are to learn three things at the same time: basic language skills, academic language skills and new subject concepts. Unlike the L1 medium teaching, where teacher doesn't have to anticipate the language demands of lessons and to provide much language support, CLIL has its own specific pattern of teaching. CLIL teacher must develop a different quality of teacher talk, use a variety of forms of interaction to encourage the learners to use L2. But probably the most important aspects that constitute good teaching of subjects in L2 are to recognise what language problems learners will have by acknowledging the language demands of lessons and to help learners to deal with language problems by providing support for language and learning. Next we consider some suggestions and examples for the different support strategies.

1. Target language glossary. It is clear that the quantity and complexity of new science vocabulary can cause problems. So highlighting key content vocabulary with explanations can be helpful. Such language glossary can be in the target language either with target language meanings or with L1 meanings
2. Using of visuals and symbols (Scaffolding). Using visuals learners can demonstrate their knowledge without relying on text-heavy production. Visual organisers can help learners understand the relationship between concepts as well. Examples of such organisers are diagrams, charts, graphs, mind maps, timelines, labelled pictures, tables and so on.
3. Task type and design. There is a range of task types that teachers can use in CLIL. Learners need a variety of tasks to stimulate output of content and language. Some tasks are more time-consuming to set up and create, and also take more time to complete. It is useful to keep a list of task types and to tick off the ones that have been used over a year. Here are some examples of task types: classify types of materials, compare and contrast results of experiments, transfer information from text to graph or table, sequence stages in producing process, jigsaw reading, PowerPoint presentations and so on.
4. Varied forms of interaction. As CLIL promotes collaborative learning, teacher needs to plan pair work or group work activities so that learners can communicate the language of the subject topic. Communicative activities should be integrated during the lesson, rather than left to the end of the class. They can be short, e.g. tell pairs of learners they have 3 minutes to brainstorm words related to concrete production or longer, e.g. tell learners they have 10 minutes to work with a different partner to draw a diagram of what the components of concrete are. Other forms of interaction in CLIL are whole class tasks, learners working on their own, teacher talk.
5. Teacher talk. The difficulty of CLIL approach is that most of the language problems have to be solved within the lesson, because if they are not, the learners will not learn the subject matter. In fact, what happens in CLIL lessons is that teachers and learners solve these problems as they go along. Teachers gradually become skilled at anticipating language barriers and the process of planning lessons to overcome them becomes routine, rather than laboured. And they gradually accumulate the new strategies which they need for providing support. To help learners listen, CLIL teachers highlight or explicitly teach vocabulary. At the text level they help learners to follow them by adjusting their talking style: they enumerate points, give examples, explain, summarise, more than they would in L1. It is very useful to ask

concept questions to check understanding. To help students talk in the classroom, they adjust their questions, they prompt (for example they start learners' responses for them), they provide vocabulary. It is very important that CLIL teacher grades language according to learners ability.

All the support strategies need careful preparation and to be well thought out, just as every stage of a CLIL lesson. But only a large amount of preparatory work guarantees the effective combination of content and language and as a result the success in CLIL approach at the Technical University.

Implementation of CLIL Approach

We also used CLIL in teaching coursers and Entrepreneurial Leadership was one of the courses studying through a CLIL approach at Samara State Technical University. Entrepreneurial Leadership was offered during the Fall 2014 semester for the first time in the frame the Masters' Programme "Entrepreneurs for Tomorrow". The first version of the course included various topics such as Evolution of the Concept of Entrepreneur, Entrepreneurship Development Meaning and Definition of Entrepreneur, Characteristics of an Entrepreneur, Definition of Entrepreneurship, Entrepreneurship Development, Nature and Characteristics of Entrepreneurship, Innovation and Entrepreneurship, Risks Involved with Entrepreneurship, Barriers to Entrepreneurship, Types of Entrepreneurs, Entrepreneurial Competencies, Entrepreneurial Strategies and others. During the course, a problem-based learning approach was utilized, assigning the students to work with a business plan. The group was broken down into 3-4-student teams. Each team was asked to write business plans.

To help student to understand the content in English we planned lessons using one of the bridging pedagogies of CLIL approach as "the Genre Egg" (Lin, 2016). According the Genre Egg, there are three circles which visualize demands of students. In the innermost circle ('field'), the key vocabulary necessary for students to build their knowledge. In the middle circle of the role relationships ('tenor') between teacher and students are mapped out, moving students gradually from the everyday role of 'student' to more discipline-specific roles of an entrepreneur, an owner of his/her own business while the teacher's roles shift among co-explorer, coordinator, demonstrator-expert, consultant and so on. In the outermost circle (mode), the different modes of communication are mapped out, moving students gradually along the mode continuum of field notes, oral and written recounts to more formal academic genres such as an information report. The strength of this approach lies in seeing students as active agents of learning taking up different roles and under the guidance of teachers.

Content learning is seen as accomplished not by rote memorization of 'model answers' given out by teachers in the worksheet answer-checking practice that frequently characterizes classrooms, especially in Russian contexts where examination pressure tends to drive teaching and learning practices. Rather, learning is seen as accomplished largely through guided interactions with teachers and peers in the context of shared experience.

Using the Genre Egg framework to identify the language demands of this unit of work, we can map out the key language resources that students need to master in order to successfully take up the different student roles and identities in the unit of work. For instance, using CLIL lesson plans (see Table 1), we can plan the different important elements in a unit of work in Entrepreneurial Strategies. CLIL lesson plans present a plan specifying the content learning goals, teaching and learning activities, student roles and identities, key vocabulary, language functions and language patterns useful in realizing these functions, as well as the genres students need to understand and produce when doing the activities in this unit. With a plan like this, teachers and curriculum designers can ensure that both the content learning and language learning aspects of a unit of work will be considered in the process of lesson planning.

CLIL lesson plans

Topic: Entrepreneurial Strategies

Language objectives:

- to develop students' awareness of the importance of Entrepreneurial Strategies;
- to provide practice of basic Entrepreneurial Strategies vocabulary;
- to develop note taking skills;
- to develop communicative ability;
- to provide interesting reading material and information to boost students' motivation;
- to integrate the four skills: reading, listening, speaking, writing.

Learning objectives:

After these lessons, you students will understand:

- how entrepreneurship is related to strategic management;
- the value and purpose of a business model;
- five different hierarchies of strategy that an entrepreneur can employ;
- what an entry wedge is, and the different major and minor entry wedges;
- three resource-based strategies an entrepreneur can use to achieve sustainable competitive advantage;
- first-mover advantage and isolating mechanisms;

- strategies for information-based ventures;
- five different industry environments, each with its own unique life cycle;
- how to craft and evaluate entrepreneurial strategies.

Table 1 **CLIL lesson plans**

Time	**Task**	**Aim**	**Interac-tion**	**Skill and Language focus**	**Procedure**
			Lesson 1		
	Homework (before the lesson)	to introduce the main strategies; to build vocabulary	Individual work	Writing	Students get the chart to complete with the help of the text
2 min.	**Warming up activity** Watching a video	to arouse students' interest and get focused on the topic	Open class	Listening	Students watch the short advertisement and guess the topic of Entrepreneurial Strategies
2-3 min.	**Brain-storming**	to elicit existing vocabulary to activate students' schemata about Entrepreneurial Strategies	Open class	Speaking	The teacher writes Entrepreneurial Strategies in the middle of the blackboard and gets students to shout out any Strategies they consider Entrepreneurial. The teacher writes the ideas on the board.
5 min.	**Watching a video of business models and strategy**	to build vocabulary of business models and strategy to develop note taking	Individual work/ whole class discussion	Writing	Students watch the first part of the video without voice so that they can concentrate only on the pictures. Students take notes individually, then discuss the new vocabulary together with the whole class
10 min.	Hambrick and Fredrickson framework	to develop critical thinking, to learn new vocabulary	Individual work / whole class discussion	Reading and writing	Students read real stories and complete the diagram, then discuss the completed text with the class

	they called the **strategy diamond**	to boost motivation with real stories			
10 min.	Summarize a number of e-commerce business models. Completing a chart	to introduce the main e-commerce business models to build vocabulary	Group work	Reading Writing Speaking	Students get the chart to complete with the help of the text. The teacher monitors and helps when necessary
15 min.	Innovative New Product Ideas The Wall Street Journal's 2005	to raise awareness of the importance of Innovative New Product Ideas	Frontal and group work	Writing Speaking	Students are encouraged to answer the questions then in groups they put the pictures of Innovative New
	Technology Innovation Award Winners				Product Ideas into the correct place of the Innovative New Product Pyramid
	Homework	to develop cooperation skills to improve higher order thinking skills	Group-work	Writing	In groups prepare a presentation on Innovative New Product and give reasons for your choice. One of the group members will present it to the class.
Lesson 2					
8-10 min.	**Presenta-tion**		Individual	Speaking	One student from each group presents their Entrepreneurial Strategies
5 min.	**Warming up**	to get feedback of the previous lesson to arouse students' interest of the forthcoming topic	Open class	Speaking	Students try to answer the questions and guess the name of Entrepreneurial Strategies

15 min.	**The story of the Fast Track to Profits** Information gap activity	to get cultural information from the text to develop speaking skills and practice the use of past simple and continuous	Pair work	Reading and speaking Using past simple and continuous	After reading the text part together students work in pairs and take turns to ask and answer questions about the story of the Fast Track to Profits
5-7 min.	**Vocabulary building**	to deduce vocabulary meaning from the given content	Pair work	Speaking	Students try to match the expressions with the definitions in pairs
10 min.	**Story writing**	to develop cognitive skills to improve writing skills	Group work	Writing Practising past simple and continuous	Students work in groups to make up a story using the given words or writing a sequel to The given story

Conclusion

The importance of entrepreneurship has been the centre of attention and recognized worldwide including Russia. The increasing interest in entrepreneurship in Russia can be seen in the current processes such as globalization and internationalisation. Entrepreneurship is seen as a possible solution of global competition and corporate downsizing which has contributed to the problem of unemployment, especially among the graduates in Russia. But to make entrepreneurship the part of students and teachers mindset teachers have to start from planning their lessons to make worldwide knowledge acceptable for Russian students.

It is getting easier if they use CLIL approach in teaching subjects. That's why not only language teachers but also content teachers need to have 'knowledge about language' and learn to use 'visible pedagogy' to be effective teachers helping students to master content in an L2. Likewise, language teachers need to become more 'knowledge aware' – e.g. to be aware of the specific language features, styles and registers used in different academic disciplines.

When teachers face each new lesson there is a feeling of uncertainty with regard to what they have to do. This usually means that teachers need to plan what they want to do in their classrooms. Planning lessons is the result of a complex planning process that includes the yearly, term, and unit plans. A daily lesson plan

is a written description of how students will move toward attaining specific objectives. It describes the teaching behaviour that will result in student learning.

To be prepared to implement CLIL into the teaching, the theoretical background has to be transformed into practice. It includes not only partial planning of the lessons but rather a long chain of steps for this approach to be efficient. Above all it requires effective planning and usage of alternative ways, patience, professional support and a great amount of time. All lesson plans must have measurable objectives. CLIL has profound methodological implications in terms of planning, teaching strategies and particularly on the teacher's role. Indeed these factors may decide upon the successful or unsuccessful final result of a CLIL lesson. CLIL lesson requires a precise and extensive preparation. First, the teacher has to decide in great detail which content is going to be taught and also has to define the English parts of the lessons. There are some features that can be designed to aid the learning process:

- Lesson objectives are a blueprint of concepts the student should understand upon completion of the lesson.
- Theory-based text enables the student to analyze, evaluate, and predict the prospects for various business concepts and plans, and make recommendations that increase the venture's chances.
- Practical applications and guidelines are offered in all the lessons to show the student how to deal with the real world of entrepreneurs, markets, and competitors.
- Street Story is the name of our boxed series of mini-cases. Each lesson contains these real-life examples drawn from the pages of the business press. Each Street Story illustrates the application of good theory to everyday new venture creation.
- Tables and figures throughout the lesson help illustrate difficult points and summarize the material for the student.
- End-of-lesson case and questions provide the basis for stimulating discussion.
- Adapted from real situations described in the business press, these short cases are provocative illustrations of what can go right and what can go wrong in the process of new venture creation.
- Key terms are listed at the end of each lesson in order that the students can be familiar with the language used in the field of entrepreneurship.
- Lesson discussion questions can provide the basis of classroom debate and be used for written assignments.
- Lesson exercises are designed for two purposes. The first is to aid the student in the development of his or her own business plan. The exercises guide the students to complete the portion of their plan

covered in the lesson. Lesson exercises can also be used to complement the classroom experience by having the student go out into the business community to observe entrepreneurship first hand.

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APPLICABILITY OF INTERNATIONAL BEST PRACTICES IN UZBEK HIGHER EDUCATION TO IMPROVE QUALITY AND COMPETITIVENESS

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Abstract. *Further reforming the higher education system is one of the hot topics in current political life in Uzbekistan. It is in the threshold of a rapid and long term change and improvement process in order to raise quality. In this regard, the international best practices of quality improvement are seen as a key task and objective before the practitioners and managerial staff. How the best practices can be adopted and applied in practice are still under discussion. Therefore, in this article is discussed the problematic issues of quality improvement in the background of the recent developments and policy reforms in higher education system in Uzbekistan. The major components of quality assurance such as adopting the best practices in teaching, research, managing higher educational institutions, and applicability of strategic management tools are argued. Moreover, the possibility of adopting the best practices in the field of internationalization such as student and teacher exchangeand working in international projects are reviewed. Each discussion is mixed with recommendations of and implications from the author.*
Keywords: *quality in higher education, competitiveness, best practices, quality assurance, benchmarking, tuning methodology, academic autonomy in higher education.*

Introduction

The latest developments and political reforms in Uzbekistan demonstrate that higher educational institutions (hereinafter HEI) in our country can no longer keep up with the global trends and integrative process around the world. Quality of education remains the top agenda of the reforming policies. In this regard, the latest updates and best practices of Quality Assurance, Quality Improvement Methodologies in Europe and other parts of the world need to be introduced and analytically explained. The questions such as, “How can best practices enrich or impact on the Uzbek higher education system ?”, “What can be learned or what are the components of best practices that can we adapt in the Uzbek higher education system?” should be the central concern of every practitioner and management staff in the higher education system. Of course, the Erasmus+ capacity building project (formerly Tempus) has significant impact and remains as one of the important instruments to improve quality improvement and

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internationalization in Uzbek HEIs. Moreover, the projects funded by UNESCO, Istedod Foundation, DAAD and World Bank have analysed and researched the applicability of achieved and learned best practices. Therefore, within this article, we conducted a small qualitative research study based on in-depth interviews using the purposeful sampling method. In this method, we selected who can best help us to understand our phenomenon (Creswell, 2008). In-depth interview helped us to understand the analytical thoughts, opinions and recommendations of administrative and managerial staffs in some HEIs and in some recently established quality inspection departments.

Administrative and managerial staffs consisted of some Rectors, Vice-Rectors, Deans, heads of chair and heads of department. Interview respondents were chosen by using purposeful sampling, i.e. those who have had adequate experience working in academic and scientific international projects. Altogether, 29 respondents interviewed.

Four major questions were central in the analysis of the authors:

1. In what extent are the best practices and advanced skills in the field of quality and competitiveness of higher education process effective and productive in Uzbek HEIs?
2. What are the possibilities of using the quality improvement methods such as strategic management, benchmarking, tuning, and continuous improvement to improve the quality assurance mechanism in Uzbek HEIs?
3. What are solutions for the problems and obstacles in the internationalization process in Uzbek HEIs?
4. What are the possibilities to accelerate giving autonomy to Uzbek HEIs?

The purpose of conducting the small interview research is to get into the situation more specifically and investigate the inferences of actual practitioner in HEIs.

Applicability of best practices and quality improvement tools

The author analysed and garnered the major ideas and views of the respondents, resulting in the following arguments.

International best practices have been the central focus of reformation policies and processes since the independence of the country. For example, best practices from the European HEIs within the Erasmus+ capacity building projects are successfully adopted and some of them, like Turkish practices of higher education failed to use in early stage of the independence of the country. However, not every practice can be adopted directly. In the process of formation, the national model of the education system, the local traditions, customs, and

ideological views have been taken into account. Each practice should be carefully learned and analysed. Nowadays, all HEIs are struggling to get a competing position at the international level, by trying to improve the academic and scientific capacities. This struggle increased more sharply after the presidential decrees № 2909 on "Further developing the higher education", № 3151 on "Further widening the participation of economic sectors and branches in improving quality of training the higher educated specialists", Cabinet of Ministers' decree № 515 on "Establishing the State Inspection for supervision of quality in education under the Cabinet of Ministers the Republic of Uzbekistan", and these legislation decrees load serious tasks and responsibilities in each administrative and teaching staff in every HEI. Responsibilities and tasks are clear, but when it comes to implementation the lacking factors, such as "unsatisfactory knowledge of foreign languages", "poor working experience in specialised areas", "poor level of pedagogical experiences" and "unsatisfactory IT skills" and sometimes "academic antagonism" can slow the process down.

However, the fast growing globalization and internationalization process never gives a chance to stay aside if any HEIs intend to position themselves in national and international levels. Since independence, the organizations such as Istedod Foundation, TACIS, TEMPUS, KOICA, DAAD and British Council projects have played a significant role to develop the internationalization activities in Uzbek higher education. However, most of the respondents have poor information about the Erasmus+ program.

Eighty percent of the practitioners are well aware of the Quality assurance tools such as "Quality control", "Strategic planning", "Strategic management", "Total Quality Management", "Tuning", which they learnt during their participation in the projects where those topics were relevant. For instance, tuning methodology was introduced within the TuCAHEA (see http://www.tucahea.org) project and this tool is discovered as one of the effective and productive tools to benchmark the best practices in the field for educational standards and academic competences. Despite the fact that the tools are considered important for higher education, the scope of practical usage has not widened.

Seventy five percent of the total respondents believe that a centralized system of higher education is the best option, at this time of being, to keep the quality under control and to monitor the process. However, autonomy is also important and it has to be transformed gradually. The majority of management staff believe that autonomy can occur if the available authorities are used by the management staff because the management staff have a wide range of authorities to take initiative actions which leads to better performance in certain areas of the process. However, the issue of poor management skills is one of the major factors for dissatisfactory results. To resolve these issues, the Uzbek government introduced a new regulation on "Establishing and organization retraining and

qualification improvement courses for the management and administrative staff in higher education", in June 12, 2015 (see http://lex.uz/pages/getpage.aspx?lact_id=2724938&twolang=true). According to this order, the administrative staff (excluding Rector) have to pass 144 hours of retraining courses whereas teaching staff must pass 288 hours every three years. The retraining course's curriculum contains subjects such as "Modern approaches to provide the quality", "Quality assurance indicators in Education", "Involving the student quality assurance process", "Innovative management in quality assurance of education", "International best practices of quality assurance in education", "Monitoring and inspection the educational quality" which can equip them with necessary competences and managerial skills. The retraining courses are mostly organized under the Head Scientific Methodical Centre (HSMC). On the other hand, the teaching staff course's curriculum is most focused on specialised specific subjects and the retraining is held under fulcrum HEIs' centres which are also considered branches for HSMC. For example, pedagogical sphere based in Tashkent State Pedagogical University, natural subjects in National University of Uzbekistan, Economics in Tashkent State Economical University etc.

Overall, by the inference of current policy reforms, we believe the higher education system gradually steps from centralised to decentralised.

We recommend widening the usage of a strategic management tool in HEIs in order to improve the effective management and administration performance. A strategic management tool forces gradual changes and it is considered as one of the effective mechanisms. Strategic management has several components which is considered effective and productive (Chadwick, 1996). However, using the strategic management tool, in most cases, depends on organizational interests and benefits. In private HEIs, strategic management is used widely and it is considered as one of the important management tools. In public HEIs, use of strategic management can come along with the accountabilities and responsibilities before government or ministry. In the case of Uzbekistan, each HEI has sufficient authorities to establish organizational strategies and to proceed the activities towards the vision and mission. Taking into account the international best practices, we recommend two types of strategic management in Uzbek HEIs: internal and external strategies. Internal strategies foresee to carry out the activities based on creativity, effective usage of the available resources, and increasing the functional accountability of each staff member and others. Internal strategy can support to overcome "resistance to change" and neutralize "academic antagonism". Because, in using internal the strategical management tool, there is no possibility not to take positive and negative factors in into account. On the other hand, the external strategic management tool mostly can be used to respond to external forces such as internationalization, accreditation and ranking which leads the HEIs to be more competitive in the country and in the world.

Internationalizationas one of the important component of quality

Internationalization issues were also broadly discussed with respondents. The internationalization process is considered one of the most vital issues in current Uzbek HEIs. The major educational collaboration has been conducted mostly with EU countries. Major destination countries were Germany, Poland, France, Latvia, Spain and Italy. Respondents also think that in terms of internationalization, the regional integration between the five Central Asian countries were in top agenda of current political processes in Uzbekistan which was not preferable before. However, the educational relationship between the five Central Asian countries is still yet to be developed. The majority of the Tempus and Erasmus+ capacity building projects, especially regional projects, included the HEIs from at least two to three Central Asian countries. For instance, the Tempus regional project TuCAHEA was the most successful and the biggest project to date. Tempus TuCAHEA project (Towards a Central Asian Higher Education Area: Tuning Structures and Building Quality Culture) mostly focused on creating the "Central Asian Higher Education Area (CAHEA)", aligned with the European Higher Education Area (EHEA), able to take into account and valorise the specific needs and potentials of the Region and of the partner countries, thus responding to the needs of the higher education community and society at large (see http://www.tucahea.org). The project had47 partners, including eight European Union Universities, 34 Central Asian Universities, and the Ministries of Education of the five partner countries (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan). Despite the project's end in 2015, the significance of the project raised a stream of recent educational policy changes.

Overall, the major percentage of educational collaboration in Central Asian countries was undertaken within the Tempus and Erasmus+ regional capacity building projects and now, each HEI seeks to diversify the collaboration. Not only in the five countries but also the internationalization process is including Afghanistan as well (Yeniseyev, 2017, December 1). On January 16, 2018, 200 Afghan youth arrived to Termez to study their bachelor degree programs which are instructed in Uzbek language (Афғонистонлик ёшлар, 2018). They study at the newly established "Center for educating Afghan citizens" in Termez. Now the government seeks opportunities to interact ethnic Uzbek Afghan citizens in the southern part of Afghanistan, to study their bachelor and master degree programs instructed in Uzbek language. These educational relations lead to bring peace and prosperity to the neighborhoods.

Taking into account the above mentioned issues in terms of internationalization, we think that the following recommendations are applicable to further develop the internationalization process.

1. In terms of increasing number of international students.

If we look at the international practices, each HEI has its own strategy to increase the number of foriegn students. The greater percentage of foreign students has a significant impact onhigher ranking position in the world, and it gives better options of diversification in financial income, provides more opportunities for local students to be exposed to international culture and traditions, allows more changes to widen the intercultural relations, etc. Therefore, increasing the number of foreign students should be one of the vital objectives and included at the top of the strategic plan of each HEI in Uzbekistan. However, in most cases, despite the political reforms, strategies remain on paper. Organizing the courses instructed in English language is being applied at a slow rate (except some HEIs and international branch universities), especially in regional HEIs. Student exchange programs should be strengthened not only within the Erasmus+ but also HEIs have to find other ways to support their own students to finance the exchange activities. There are some problematic issues in organizing student exchange. The most important one is mutual recognition of the student's grade at the home university while he or she is accepted to another university. The traditional grading system and credit assessment system has several discrepancies, which is yet to be discussed and to come to any conclusion.

2. In terms of teacher exchange activities.

Compared to students, teacher exchange programs are well carried out within the programs such as Erasmus+, Istedod Foundation, DAAD. However, hiring international experienced professors still remains problematic. Despite the new legislation introduced on inviting foreign professors, we may meet them in HEIs very rarely. In this regard, more financial independence should be given to HEIs which can make the process more flexible and intensive. According to international practices, teacher or professorship positions for foreigners could be available in each faculty and department level. Based on contract and negotiations, the certain requirements should be set and announced which allows choosing the appropriate person by competition. On the other hand, the flow of local teachers and professors dramatically increased because of the low income and salary. The current reforming policy is foreseen to minimize the "Brain drain" and encourage teachers to remain in their home country and strengthen the academic potential.

3. In terms of conforming teaching curriculum with international standards.

The university curriculum structure in Uzbek higher education has a distinctive features and peculiarities stemmed from rich cultural and traditional inherited dignity of the nation. The core and optional subjects divided into blocks, what we call block of social-humanitarian subject, block of disciplinary subjects, and optional and other subjects. Taking account the unique cultural heritage and

moral behaviors the social-humanitarian block of subjects are taught in every higher education institutions as a part of the core curriculum. In overall, the national ideology which can give positive effect not only Uzbek youth but to other nations, is a part of the whole globalization process.

However, the university curriculum in Uzbekistan is to consider making more flexible, mobile, and operative which can be fit to market demands. The curriculum consideration and review tasks responsibilities are delegated to every fundamental institution of different disciplines. These institutions are in need of to exchange and benchmark the experiences with leading universities in the world.

We believe conforming the teaching and academic curriculum to the modern requirements and needs of employers, society and market is considered as one of the strategically important tasks. We recommend, Each subject's syllabus has to be created and lesson plans have to be reviewed. The credit system has also gradually adapted by piloting in certain institutions. For example, Tashkent State Law University started to pilot the credit system in 2017. We also recommend to widen usage of the textbooks written in English language in post-graduate level studies. It is important to start teaching research methodology subjects for PhD level students.

Conclusion

Overall, Uzbekistan has every potential to integrate the higher education system with global processes. The international best practices and advanced skills in improving the quality and competitiveness of higher education are crucially important in currently urgent reformation process in the country. The quality improvement methods and tools such as strategic management, benchmarking, tuning are considered applicable in practice. For instance, the tuning methodology is already in use and it showed own efficiency in TuCAHEA project. By the result of research we believe that autonomy of every HEIs also important and government policy has gradually solving the issue by extending authorities. However, there are several issues as mentioned above which require much investment and reformations which can be undertaken by cooperation with foreign universities and scientific institutions.

Building a legal democratic state requires to implement the application the effective mechanisms and raise the level of quality in every public sector as well as in private. Volume of issues is widening while reformation process accelerates. For instance, in 2018 year and the next upcoming years, the number of student admissions to HEIs will be raised dramatically. Nevertheless, how the current scientific potential and curriculum can respond to these demands is remaining problematic. How the quality and competitiveness can be achieved? Of course, application the international best practices can play major role at this moment. The learned opinions and views of the current higher educational practitioners and

teaching staff disclose that the academic environment in Uzbek higher education are quite open for constructive changes and applying best practices. Young and talented graduated students should be more attracted and encouraged to stay in higher education to engage in academic and scientific occupation. Because scarcity for young cadres is one of obvious issues. Strengthening the international cooperation with foreign universities remains vital for the next decades. Therefore, universities in the world can count on productive and valuable collaboration with Uzbek HEIs.

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OPPORTUNITIES OF TRANSFORMATIVE STUDENT LEARNING – THE CASE OF THE ERASMUS+ PROGRAMME

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Abstract. *This article indicates that university-based mobility programmes enable communication between students and academics from different countries, creating potentially favourable circumstances to distance themselves from the hitherto-accepted habits and, as a result, can lead to transformative learning. The theoretical basis is J. Mezirow's theory of transformative learning. The results of research conducted among the students participating in the Erasmus+ programme are analyzed. A survey questionnaire was used to assess the changes in selected mental habits observed by the above-mentioned students. According to the collected data, more than half of the respondents reported strengthening as many as 13 out of the 16 listed mental habits.*
Keywords: *academic mobility, Erasmus+, higher education pedagogy, transformative learning.*

Introduction

Challenges that young people have to face in the contemporary world, particularly when operating in globalised communities or in the continuously evolving labour market, provoke questions concerning education and efficiency of activities undertaken within its boundaries. It is formal education that is committed to prepare subsequent generations to meet those challenges. Therefore, the questions that continue to be asked concern the extent to which, through organized learning processes, we are able to help new generations to find fulfilment in this world and how to organize processes to make it possible for school and university graduates to acquire competences to enable them to successfully manage the surrounding world. Representatives of the World Economic Forum, debating in January 2018 in Davos, clearly specified that directions in education for further generations should change. As the director of London School of Economics, Minouche Shafik, pointed out, "Anything that is routine or repetitive will be automated" (website: Business Insider Polska, Kariera, January 2018). Conclusively, it will prove entirely inefficient, even in the nearest future, to prepare young people to function according to the schemes developed by communities. The importance will be placed on creativity and

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reflection, which help to go beyond strict behavioural frameworks and to undertake activities in those fields where machines are not able to replace human beings. In this context, Jack Mezirow's (1991) theory of transformative learning seems to provide an interesting method to analyse learning processes, as it emphasizes the possibilities for adults to take part in educational processes which go beyond formative educational frameworks based on the introduction of specific schemas and behavioural patterns. This may provide an incentive to search for new solutions within the higher education didactics. The starting point in this study is a preliminary analysis of changes occurring in the area of mental habits, one of the key categories in Mezirow's concept, which are revealed as the effect of experiences resulting from participation in the Erasmus+ student mobility programme. The aim of the conducted pilot studies is to provide data demonstrating the validity of explorations carried out in this direction and to facilitate determination of areas requiring deeper investigations. This paper, apart from the pilot study results, also presents an introduction to Mezirow's theory and issues concerning mobile students.

Mobile students' opportunities to learn

The essence of transformative learning lies in a readiness to question the premises that so far have provided the main point of reference for interpreting and understanding the world, which consequently leads to personal development of a human being. Such readiness typically emerges in situations that, to some extent, destabilize previous behavioural schemes and destroy the safe network of relations developed for years (Pleskot-Makulska, 2007). The transformative learning theory, proposed by Jack Mezirow (1991), helps to follow those human development processes, which exceed the formative frameworks of shaping specific patterns, views or behavioural schemas. These processes, apart from automatically and uncritically adopting ways of thinking and behaving from other people, display a need to emancipate students from those unreflective behavioural patterns. This is related to the change concerning the manner in which meaning is given to the reality surrounding the human being and to basing all activities on conscious, critical reflection (Pleskot-Makulska, 2007). Experiences are crucial for the learning process, along with the methods applied to interpret those experiences and to give them meaning (Mezirow, 1991). From the perspective of examining learning opportunities for students, as a group of young people[1], it is worth focusing on several basic analytical categories emerging from Mezirow's theory. A starting point related to learning is the frame of reference category.

[1]Students belong to the "young adults" category, described by R. J. Havighurst as ranging from 18 to 25-30 years of life (Strelau, 2003).

Frames of reference are the structures of culture and language, through which we construct meanings (understood as making sense), giving coherence (understood as importance) to our experiences (Mezirow, 2009). In other words, a frame of reference is made of assumptions and various types of expectations of man, through which he filters and interprets the world surrounding him. On one hand, a frame of reference establishes boundaries for understanding reality and helps man to function in the world while, on the other, it reflects the barriers inherent to man and his surroundings. Therefore, it reduces the possibilities of operating in a manner that differs from the one assumed so far (Pleskot-Makulska, 2007). Mezirow distinguished two dimensions of the frame of reference, namely, habits of mind and points of view. The former mean the assumed and strengthened ways of thinking about something, of feeling or acting. Since they are deeply rooted in human subconsciousness, the changes occur in them very rarely. In turn, points of view are specific demonstrations of our habits of mind. These can be judgements, feelings or attitudes towards a specific situation or a person and they are also less permanent than habits of mind (Mezirow, 2009). A change, which is a central category in Mezirow's theory, is referred to as reframing within an individual frame of reference, and is built on the ability of man to change himself and to transform his previous schemes of thinking and acting as a result of new experiences. At this point, another category emerges, important from the point of view of students' learning analysis, referred to as a disorienting dilemma. It occurs in a situation evoking tension and anxiety, and causes a rift between the previous ways of understanding the world and the new needs. Hitherto-understanding of the world is supplemented with new experiences in which the student tries to understand, by imposing new interpretations on them by critical reflection of assumptions (Mezirow, 2009). It is worth emphasizing that the process of transformative learning takes place in communication between people, where the intentions, values and feelings of another person are being understood (Mezirow, 1998). Therefore, a question emerges of how to create situations that fit the definition of a disorienting dilemma in Mezirow's understanding (Pleskot-Makulska, 2007). It seems that higher education institutions provide particular opportunities to generate activities that promote going beyond the formative aspects of learning. Those unquestionably include mobility programmes, which enable communication between students and academics from different countries, creating potentially favourable circumstances to gain distance towards the habits adopted so far. In effect, this can lead to transformative learning. The history of universities demonstrates that mobility was the idea underlying the establishment of the academic community and, from the very beginning, their activities were of

an international nature[2]. Currently, the mobility of students and academics is one of the key principles of the Bologna reform and one of the basic elements of the European Area of Higher Education (Szymańska, 2009). The most popular mobility program is undoubtedly Erasmus+, which provides students with an opportunity to go abroad for a part of their studies or to take job placements, e.g. in cultural centres, museums, law firms, non-government organizations or enterprises in a selected partner state, while academics can deliver lectures or undergo training in partner institutions (Szymańska, 2009). Erasmus+ promotes the development of horizontal mobility, which consists in completing a part of the first or second degree studies in another university, in the same country or abroad (Szymańska, 2009). Participation in the horizontal mobility programme by the student at the stage of the first degree studies may become a factor determining his or her further mobility-related activity, and frequently contributes to the decision to pursue the second degree studies abroad (Erasmus Student Network, 2010). First experiences related to mobility very often encourage students; they also provide them with a huge load of experiences and contacts, which permanently change their future life, as well as their educational and professional paths. The programmes funded by the European Commission facilitate mobility and operate as a kind of assurance during the first stay abroad, both in financial and organizational terms. Students are provided with care by the partner institutions accepting them, through a network of institutional and faculty coordinators involved into the Erasmus+ programme, as well as the international association of students – Erasmus Student Network. Erasmus+ makes it possible to reduce the costs of academic exchange, but also promotes the building of partner relations between higher education centres, cooperation between universities and entrepreneurs, carrying out joint research, sharing experience and the application of modern IT technologies (Krajewski, 2004; Teichler, 2009; Dvir & Yemini, 2017). Students' mobility unquestionably affects their learning process, personal development and competence acquisition. However, there is no research demonstrating what really takes place in the area of personal development of a mobile student, particularly as regards "deeper" effects of mobility experiences in the sphere of personal development, such as possible changes to mental habits, patterns, attitudes or upheld values. The studies conducted so far rather concerned the effects of mobility on various levels of academic teaching and methods for enabling and facilitating students' mobility

[2] The first university was founded in about 1088 in Bologna, northern Italy. Students and academics had the right to freely come to the town, were granted safety during their stay and freedom to teach Roman and canon law. Students arriving from a given country or a group of countries created associations of foreign students. Similar universities were soon established in Paris, Oxford and Cambridge. Universities quickly became study centres of international importance, often described as *studium generale*, i.e. general schools, with a European range. Young people, searching for knowledge, wandered through Europe from one university to another (Pedersen, 2000).

(Bridger, 2015). Studies and statistical analyses have also been conducted concerning the activities of Polish universities under the Erasmus programme, which describe their types, range and effects (Członkowska-Naumiuk, 2015). Additionally, the impact of the mobility of students carrying out a part of their studies or job placement abroad under the Erasmus programme on the improvement of their qualifications, employability or institutional development of higher education institutions were the subjects of examination. The importance of programme implementation for processes related to internationalization of higher education institutions is also being assessed (Brandenburg, 2014). Moreover, the results of analyses have been published concerning the impact of students' mobility on the quality of education in individual countries (Demange & Fenge, 2010). The above-mentioned studies only to a minor extent concern the personal development of students and their individual deep experiences related to mobility itself and to the establishment of intercultural contacts. Therefore, a need exists to explore this vast area concerning the significance of mobility for personal development of young people who undertake it.

Methodology note

The research presented in this paper was based on pilot studies carried out on a group of 91 students participating in the Erasmus+ programme. Two research questions were posed: To what extent does international mobility of students trigger the transformative learning process and which new experiences are regarded by students as the most important in the context of the changes observed?

The research was conducted as a survey (Babbie, 2003). The data were collected based on a questionnaire prepared for the study. For specifying the content of the area of explorations, a set of significant mental habits developed by Costa and Kallick (2007) with direct reference to Mezirow's theory, proved useful. The above-mentioned authors named and described a group of 16 mental habits, which are developed in childhood and in adulthood are subject to more or less significant modifications, making up part of the personal development of a human being. This set forms the main matrix for the prepared research tool. Each of the mental habits included in this set was provided with several sentences of description, to specify its nature in more detail. The list of questionnaire items prepared in this way was used to determine the opinion of students with regard to the changes emerging in the area of specific mental habits – their reinforcement or weakening, or the fact that they stayed at the same level. Considering the structure of the research tool, we cannot describe the intensity of the changes declared, but only record the fact of their initiation as a result of mobility-related experiences and participation in educational activities abroad. It is worth remembering that for participation of students in international educational

exchange, the process of communication is based on foreign languages, which creates a specific area of experiences in this regard. In the two final questions, students were asked about their experiences from the mobility periods to which students attach the highest importance (an open question) and their effect on the changes observed (a semi-open multiple choice cafeteria question). All questions were formulated in the English language, knowledge of which is common among students participating in Erasmus+. Data were collected in both ways: through an auditorium questionnaire and an online survey. The respondents participating in the research came from 22 countries. Women, who accounted for 65 % of the surveyed students, made up the prevailing group, while men accounted for 35 %. Most students (77 %) in the examined group were participating in Erasmus+ for the first time. For other students, the number of mobility periods ranged from 2 to 5. The aim of the study presented is to describe to what extent mobility-related experiences create space for students' transformative learning.

Towards the change of mental habits among mobile students – pilot study results

An analysis of students' opinion on mental habits, one of the key elements of Mezirow's theory, was used as the starting point in examining the possibilities of obtaining an insight into transformative learning processes resulting from mobility-related experiences. The search for areas within which students observed certain symptoms of changes related to new foreign experiences was based on a summary of their responses, in which they declared reinforcement of mental habits listed in the survey. Mental habits were arranged according to a rising share of students who recorded such changes, as presented in Figure 1.

The data obtained demonstrate that a review of mental habits made by students results in a belief shared by a significant group of the surveyed concerning the emergence of positive symptoms of a change in various areas. For each feature, a certain share of persons observed its reinforcement, which ranged from almost 35 % of respondents observing "reinforcement of striving for accuracy", to over 81 % observing "reinforcement of thinking flexibility" (Figure 1). More than half of the surveyed recorded reinforcement of the described features for 13 out of 16 mental habits listed. Such a broad scope of changes felt by the students can prove the significant developmental potential of mobility experiences, related to relocation not only in geographical terms, but also in cultural, language or educational aspects. Facing the "new" provides conditions promoting exploration of basic assumptions of one's own behaviour. In view of similar numbers of students indicating reinforcements of individual mental habits, four groups, showing certain tendencies reflected in the transformative learning process, were determined for the purposes of the analysis. These are the groups

of habits related to learning in new situations (group 1), interpersonal relations and communication (group 2), triggering reflections over one's own actions (group 3) and the purposeful planning of one's own attempts (group 4).

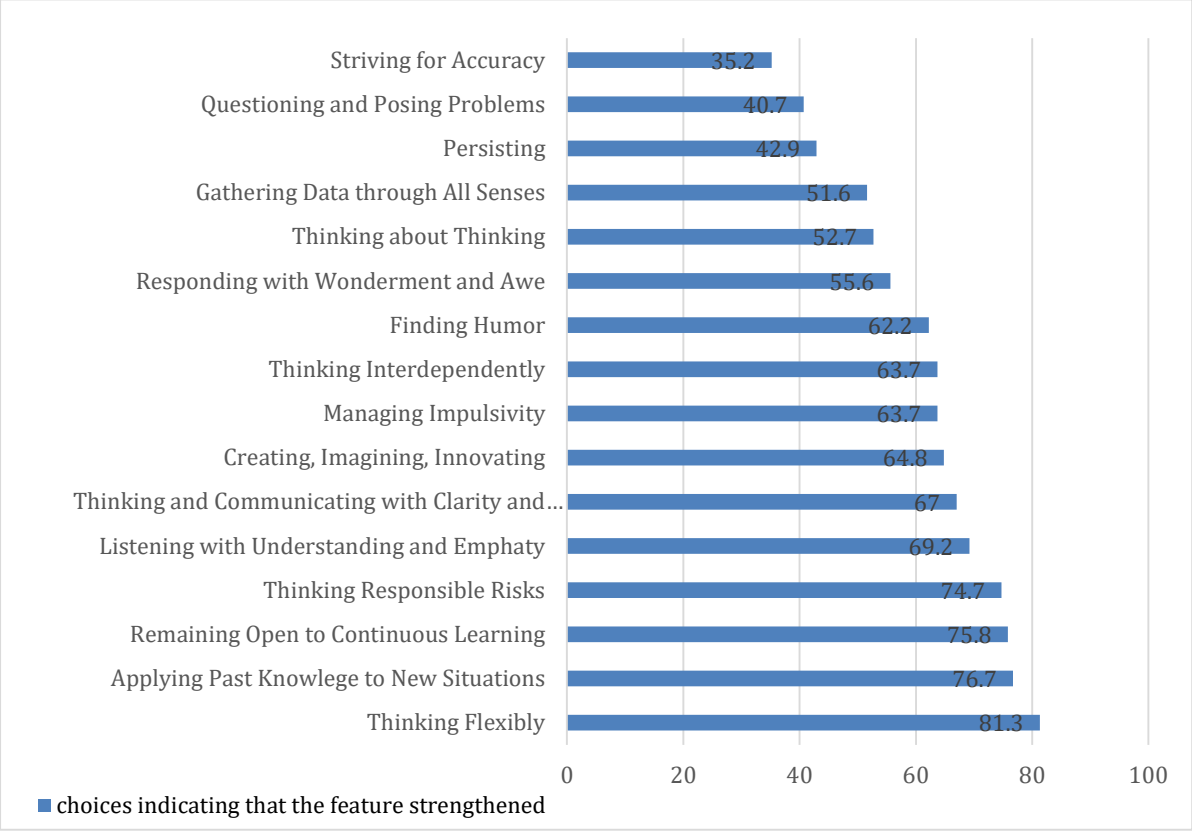

Figure 1. **Choices of students indicating reinforcement of features in specific mental habit areas – data expressed in %, source: own research**

The first group includes four mental habits indicated by more than 70 % students in the examined group: thinking flexibility, applying past knowledge to new situations, remaining open to continuous learning and the ability to take reasonable risks. The need to trigger these references results from the specific nature of learning in new situations, in which first of all reserves of past knowledge are used, processed later on in various ways, which provides a feeling of security and control of the situation. The habits included in this group seem to be fundamental for solving problems related to everyday existence in a new place and culture, therefore almost all students quite frequently had to return to them or work on them.

The second group includes habits whose reinforcement was claimed by 69.2 % to 62.2 % of the survey, namely: listening with understanding and empathy, striving towards thinking and communicating with clarity and precision, creative thinking, innovativeness, managing one's own impulsivity, thinking towards cooperation, sense of humour. This group clearly demonstrates aspects

related to interpersonal relations, communication and orientation towards cooperation, which significantly condition the transformative learning progress. This group of habits is related to communicative learning, i.e. voluntary and full participation in a dialectic discourse with other people, in order to arrive at new, more reasonable judgements, more adequate for a new situation (Mezirow, 2009).

The third set of habits, in the area of which observable symptoms were confirmed by 55.6 % to 51.6 % of students, include: responding to the world with wonderment and awe, meta-cognition and data gathering through all senses. Here, in turn, the emergence of the next, deeper state of change, based on triggering the reflections over one's own existence and action, can be observed. This is a group of habits related to critical self-reflection over the assumptions – a critical judgement of sources, nature and consequence of mental habits – our own, but also of other people. In the further stage, this is transformed into a more general, constant disposition to critically reflect upon one's own assumptions and the assumptions of other people, to search for justification of one's own transformative insights through participation in the discourse and to behave in life according to this new "evolved" way of perceiving things (Mezirow 2009). Since these are deep changes requiring a high level of reflection, they are not experienced by all students.

The fourth group is made up of mental habits whose reinforcement was declared by the lowest share of students (between 42.9 % and 35.2 %). These are: persistence in striving to reach goals, questioning and posing questions, and striving for accuracy. Here, the dimension of subjective, conscious and purposeful construction and achievement of one's aims can be observed, along with planning activities and striving towards their full and precise implementation. A low score obtained in the area of reinforcement concerning these features can suggest that accuracy, which is particularly important in formal education, ceases to be the priority in dynamically changing conditions, which additionally require communication in various languages with people originating from different cultural frames of reference. In colloquial terms – it is more important to make oneself understood and solve a problem than to preserve a high level of precision in one's utterance or perfect quality of solutions developed.

The study also attempted to describe areas of experiences, which in the students' opinion could contribute to triggering the changes, which they observed. In the first of the questions, respondents were asked to choose the three most important experiences out of the thirteen listed; in the second question, they were invited to present their own opinion on this subject (an open question). The data obtained in response to the first question make it possible to distinguish two main areas of significant experiences. The first one is related to requirements the students had to face by functioning in a different culture and new situations. The following experiences are mentioned as particularly inspiring: observation of

relationships between people in the host country – 62.9 % of the responses, and the need to adjust to the standards (e.g. law, cultural) in this country – 44 % of the responses. For almost one-third of students it is important to independently cope with new situations – 32.6 % of the responses, which is often accompanied by observation of other people and their way of handling difficult situations – 24.7 % of the responses. The second area is related to educational experiences, differing from the hitherto known mode of learning. Different ways of teaching or methods used in the host institutions are indicated by 41.6 % of the respondents. Every fourth student also attaches great importance to his or her contacts with peers from other countries at the university (28.1 % response rate) and close relations with lecturers at the host institutions (24.7 % response rate). The statements of Erasmus+ participants provided as an answer to an open question are primarily focused on the first area of experiences. Students most frequently mention the importance of meeting new people and their cultures (attitudes, opinions) and learning how to live in a different culture (52.6 % response rate). Changes emerging in the perception of the world are also related to travel and related to unpredictable situations (the need to manage time or money), which force them to take responsibility for themselves, and to be involved in unaided and autonomous activities (24.4 % response rate). In addition, learning the language is an important element of the mobility period for every fifth person (20.5 % response rate). Those statements clearly correspond to previously discussed areas of reinforced features describing mental habits and, in particular, to the two most clearly identified groups related to learning in new situations and to anchoring this process to interpersonal relations and communication.

New horizons

The results of pilot studies presented in the paper do not provide the grounds for drawing clear conclusions. However, they make interesting material for constructing further research projects concerning the possibilities of evoking/initiating transformative learning processes among students. On one hand, they confirmed the results of the research presented, e.g. in the “2011 Eurobarometer - Youth on the Move” report (Gallup Organization, 2011), indicating that acknowledge of foreign languages, increased awareness of other cultures and higher adaptability are the main benefits of staying abroad mentioned by students themselves. They also demonstrated that exploration of broadly understood education of young adults in the context of J. Mezirow’s theory is very promising. The next stage of research would require the application of qualitative strategies, which could provide answers to the question about specific situations or experiences that trigger an effect of changes to mental habits (both in terms of their weakening and reinforcement), the way in which the environment affects the

development of habits and the extent to which the reinforced habits affect their functioning at work, at the university and in everyday life. The context of improving academic exchange would provide a point of reference particularly interesting to us, with a view towards increasing the effectiveness of transformative learning. A detailed examination of the sphere of mobile student experiences that act as an impulse for changes in mental habits may also provide a starting point for the search for educational experiences to ensure similar effects without the need to change the location where learning takes place. This may be tele-collaboration, which allows online intercultural exchange between international students' groups (Lewis & O'Dowd, 2016).

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CROSS-CULTURAL COMMUNICATION COURSE AS A FORM OF INTERNATIONALISATION AT HOME WITHIN RUSSIAN HIGHER EDUCATION INSTITUTIONS

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Abstract. *Internationalisation of higher education at home is a relatively new phenomenon for Russia but, as a concept, it is one that is both broad and variable. The internationalisation of higher education at home has been influenced by the globalisation of economies and societies and the increased importance of knowledge. It is driven by a dynamic and constantly evolving combination of political, economic, socio-cultural and academic rationales. These motives take different forms and dimensions in different regions, in institutions and within their educational programmes. This study covers an intensive course named "Cross-cultural Communication" and its impact within Tempus, Erasmus+ and other funding programmes as well as traditional content of this course. The content of the course is evaluated through several approaches. The starting point is to consider how particular courses are taken into account in long-term strategies of universities, and on the other hand, how these intensive courses advance the implementation of internalisation strategies. Another approach concerns internationalisation at home and helps find out how, specifically, intensive courses advance internationalisation. The next point covers education and teaching development and shows what role particular courses have in the transfer of teaching methods, materials and whole course concepts in Russian higher education institutions.*
Keywords: *internationalisation, globalisation, internationalisation of higher education at home, higher education, cross-cultural communication.*

Introduction

The trend of globalisation with the increasingly popular internationalized activities signifies the need for nurturing global citizens with effective intercultural communication skills. Growing interest in internationalisation of higher education can be explained by different reasons: the process of globalisation of the economy and labour markets; demand in internationally competent workers with knowing of foreign languages, social and intercultural skills; the need in maintaining economic competitiveness and fostering intercultural understanding. Advantages of internationalisation of higher

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education are also apparent: improved quality of training, joint research projects, implementation of international quality standards and enlargement of international cooperation.

This paper examines some aspects related to this theme and is a reflection of the importance and current attention paid to the international dimension of higher education in Russia. Russia joined international processes later than other countries, and there is a growing demand of IHE from both national and institutional authorities and from students themselves.

The object of the research is the process of internationalisation of higher education (IHE), particularly internalisation at home. "Internationalisation at home", integrating international and intercultural learning outcomes into the curriculum for all students, is a contemporary phenomenon which has not yet been widely recognised by higher educational institutions, especially those in provincial cities.

The methods of investigation used by the authors include deduction, comparative and logical analysis, as well as observation and generalisation methods. This article demonstrates that internationalisation at home can be considered a comprehensive model for preparing every student with the global competencies for today's interconnected and diverse society.

Internationalisation of higher education: development and contemporary state

Over the last two decades, the European programmes for research and education, Tempus and Erasmus+ programmes in particular, have been the motor for a broader and more strategic approach to internationalisation in higher education in Europe and an example for institutions in Russia (Knight, 2003, 2004, 2006; Huisman & van der Wende 2004; de Wit 1995; de Wit et al., 2015; Kupriyanova-Ashina & Jhu, 2013; Lopukhova & Suchkov, 2016; Makeeva & Spaubeck, 2016, Lopukhova et al., 2017, etc). Let us lend some brief insight into the history of this phenomenon.

In the context of education, the term *internationalisation* became popular at the end of the 1980s. For almost two decades it was mainly defined only at the institutional level as a set of activities (Arum, 1992). Later, J. Knight updated the definition of internationalisation as "the process of integrating an international, intercultural or global dimension into the teaching, research and service functions of the institution" (Knight, 2003). She also suggested distinguishing external internationalisation which is "international academic mobility (education abroad, cross-country education, trans-border education)" and internal internationalisation (that is the "implementation of world educational standards, intercultural programmes, internationalisation of educational programmes and

courses") (Knight 2003, 2007). In the European Parliament study, published in 2015, the definition of internationalisation is expanded to "the intentional process of integrating an international, intercultural or global dimension into the purpose, functions, and delivery of postsecondary education, in order to enhance the quality of education and research for all students and staff, and to make a meaningful contribution to society" (de Wit et al., 2015). Still, a broader definition, which goes beyond the specific dimensions of teaching, research, and service, was offered only a year later and goes as "Internationalisation is an ongoing process of change whose objective is to integrate the institution and its key stakeholders (its students and faculty) into the emerging global knowledge economy" (Hawawini, 2016). It calls for changes in the institutions' existing structure, operating modes, and mindsets in order for the institutions to join and contribute to the shaping of the global knowledge economy. This transformation of the definition shows that the concept of the internationalisation of higher education is moved from the fringe of institutional interest to the very core of national interests.

In Europe, it is apparent that the internationalisation as a strategic process began with Erasmus. The programme created common understandings and drivers for internationalisation in most countries, and this was further reinforced by the Bologna Process. But even in Europe, seen around the world as a best-practice case for internationalisation, there is still much to be done, and there is an uneven degree of accomplishment across the different countries, with significant challenges in Southern and, in particular, Central and Eastern Europe and countries of the former Soviet Union, including Russia.

At the same time, internationalisation strategies are substantially different for different fields of education as well as for different countries. It remains fairly difficult to talk about internationalisation in Europe in generic terms. "Unity in diversity," which has famously described much of the political and economic integration in the framework of the European Union, is equally valid in the sphere of higher education (Progler, 2014). Indeed "internationalisation at different speeds" may be one of the best ways to describe the European context. What unites most European higher education institutions is their strong interest in acquiring or enhancing their international profile and reputation, but there has been some uniformity and joint actions. European states have been encouraged to cooperate with other European counterparts in a range of international activities, particularly in terms of mobility and creating joint and double degrees. The trend has also been to foster a friendly yet competitive approach with the rest of the world. Support for internationalisation activities has also penetrated the nation-level policy discourse.

So, there are different accents and approaches. Internationalisation strategies are filtered and contextualised by the specific internal context of a university, by

the type of a university and how universities are embedded nationally. Internationalisation strategies are shaped at the programme level by the different relationships these programmes have with the market and society.

Russian higher education institutions on the path of internationalisation

In Russia, about thirty or so years ago (the times of so-called "Cold War"), activities that can be described as internationalisation were usually neither named that way nor carried high prestige and were rather isolated and unrelated. In the late 1980s (the times of the "Iron Curtain" fall) changes occurred: internationalisation was invented and carried on, ever increasing its importance. New components were added to its multidimensional body in the past ten years, moving from simple exchange of students to the big business of recruitment, and from activities impacting on an incredibly small elite group to a mass phenomenon. Since the mid-2000s, internationalisation has been high not only on the agenda in European and but also in Russian higher education policies (Law on Education of RF … 2012; Kupriyanova-Ashina & Jhu, 2013; Marginson, 2014; Stukalova et al., 2015).

Today, with increasing internal and external pressures Russian universities as well as many universities in the world are expected to develop strategies in all areas, including the international dimension to make their competitiveness appealing to both domestic and global markets. Russia's education potential has traditionally been seen as an essential resource for the country's development. In addition to that, on the national level the management of internationalisation process of educational has always been determined by the state policy in the sphere of education and controlled by the national government. Yet, recent initiatives of the government in the area of higher education give more freedom to universities and include innovative educational projects, development and support for national research universities and most recently, international competitiveness programmes. Russian state policy in the sphere of education shows that it's based on the creation of conditions that favour the integration of the national educational system with those of other countries (Law on Education of RF … 2012; Stukalova et al., 2015).

Thus, in recent years not only European but also many Russian universities have participated in exchange programmes, established cooperation with abroad universities, also this period is marked by active work of international organisations. With increasing internal and external pressures, Russian government has really being developing a successful strategy in the area of the international cooperation in higher education to make universities more competitive and appealing to both domestic and global markets.

Internationalisation of higher education at home as a worldwide phenomenon

Thus, over the years internationalisation has moved from added value to main-stream. Increasing competition in higher education and the commercialisation and cross-border delivery of higher education have challenged the value traditionally attached to cooperation, such as exchanges and partnerships. However, universities can no longer rely only on study abroad programmes that serve few and often elite students. Instead, higher education institutions must design, deliver, and measure such multilevel curricular and extra-curricular activities that all students have the opportunity to increase their knowledge of and engagement with the world.

It all shows that it is also vital for universities to work out comprehensive strategies that go beyond mobility and encompass many other types of academic cooperation such as joint degrees, support for capacity-building, joint research projects and distance learning programmes. And they need to prepare for internationalisation at home those 80-90 % of students who will not be mobile because of different reasons. That is why, the internationalisation of the curriculum and the teaching and learning process (also referred to as 'internationalisation at home') has become as relevant as the traditional focus on mobility.

So, internationalisation of higher education at home focuses on the curriculum, teaching and learning, and learning outcomes. It developed in Europe in 1999 through *the Internationalisation at Home' movement* as a reaction to the strong focus on mobility and the Erasmus mobility target of 10 % of students, with the goal of providing an international dimension to the other 90 % (de Wit et al., 2015).

It was originally defined as "any internationally related activity with the exception of outbound student and staff mobility" (Crowther et al., 2001) but was later better described as "a set of instruments and activities "at home" that focuses on developing international and intercultural competences in all students" (Beelen & Leask, 2011). A recent revising of the term has led to a revised definition of IHEH as "the purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students within domestic learning environments" (Beelen & Jones, 2015). In other words, in contrast to internationalisation abroad, IHEH encourages students to attain intercultural competencies without leaving their own universities.

Coming back to the situation in Russian higher educational institutions, we can remind that the analysis of the Russian state policy in the sphere of education shows it's based on the creation of conditions that favour integration of the national educational system with those of other countries (Stukalova et al., 2015).

In most cases, internationalisation discourse was mostly concentrated on the need to harmonize the national system with global standards, especially European. Then higher education institutions took the lead in developing their own policies and practices for internationalisation at home, curriculum internationalisation, learning objectives and in the development and implementation of collaborative degree programmes with international partners.

Still, there is a certain obstruction which should not be underestimated. Language barrier is one of the main factors that hampers the inflow of foreign students to Russia and prevents Russian students from going abroad. In the European context, implementation of English-taught programmes appears to be a strategic choice to strengthen internationalisation efforts by enhancing attractiveness to international students, improving domestic graduates' readiness for employment in a more global or international context. Still, many Russian students and faculty are simply not operating effectively in English, a sad fact putting them at a disadvantage for both teaching and learning.

Besides, lack of financial support at the institutional level is identified as the most important obstacle for internationalisation.

These are the main reasons why many universities in Russia try to seek other options of internationalising their activities in their own way. They are investing in the preparation of students for their international mobility, especially by enhancing internationalisation at home. Some invite guest professors, attract faculty from international academic market, introduce courses in English, find partner institutes in Russian-speaking countries of the former Soviet Union or simply recruit students from low-income countries to come and study in Russia. Still, all these activities can only partly be referred to as IHEH.

Firstly, IHEH does not require the presence of international students. At the same time, simply providing a programme in English is insufficient for it to be considered an internationalized curriculum. If the programme content and learning outcomes are not internationalized, and remain the same as in the original language, merely changing the language of instruction will not make them so.

Just as with internationalisation of the curriculum in general, IHEH is specific to the content of a discipline and, within that, to a programme of study in a given university.

Cross-Cultural Communication Course: traditional approach

"Cross-Cultural Communication" has been taught for about a decade as a compulsory course for students of the faculty of foreign languages in many Russian universities. For many years previously, culture has been neglected or being treated as a supplementary topic in English as a Foreign Language teaching. The CCC course was introduced to meet the demand of rapid globalisation. The

course was the only opportunity for students of provincial universities to explore differences and similarities in cross-cultural communication by comparing different cultures and nations.

The CCC course has been originally designed to develop students' competences through communicating with people from different cultures (mostly from the cultures of the languages learnt by these students). The practical and conceptual framework generally included cultural variations in communication behaviours and motivations, and verbal and communication activities across a variety of cultural contexts. The course aimed at developing an individual's intellectual appreciation for cultural differences and sensitivity regarding intercultural interactions, mostly through the use of the language. Thus, we can say that this course presented rather a linguistic approach which looked at communication as a rule-governed process of signification. The main objective of the linguistic approach was to help students overcome cross-cultural communication problems by providing them with a fixed set of rules and strategies for communication. Up to this moment, in many universities the CCC course is taught in this framework.

For example, in Samara State University of Social Sciences and Education, the CCC course is offered to second-year bachelor students. It includes 5 double-classes of lectures, 9 double classes of seminars and a set of tasks for self-study work, based on reading materials. Lectures are given in class and are supported by Power Point presentations. For seminars, students are expected to read the assigned materials in advance and come prepared to participate actively in the discussions. Classroom activities are designed to generate discussions and exchanges of ideas and opinions among the students. In the end of the course students also write a paper (15-20 pages), based on a topic selected by the student and agreed upon by the teacher. This assignment asks students to apply some basic concepts and conceptual framework that they have learned in the course and discuss topics they are interested in. They are also encouraged to conduct short and easily manageable empirical investigations. Students are traditionally assessed in the end of the term according to their performance: this includes attending the classes regularly, coming to classes on time, coming prepared and participating actively in classroom discussions, and contributing positively to classroom environment.

The main topics covered in the course are as follows:

- verbal communication;
- different cultural values in language expressions;
- cultural linguistics;
- laws and principles of communication;
- stereotypes in cross-cultural communication;

- academic communication in different cultures;
- humour as a part of national cultures;
- translation as a type of cross-cultural communication;
- etc.

As a result, by the end of the CCC course, students acquire comprehensive knowledge of cultural differences, but do not gain cross-cultural communication skills, and are not able to apply cross-cultural terms, concepts and theories to real life situations, current events and information learned from the course materials. But only being able to communicate cross-culturally increases the success in international business, enables productive interpersonal contacts and decreases mutual misunderstanding which are all aims of internationalisation.

Though English-medium courses are of interest to local students and can help promote "internationalisation at home", the CCC course as it exists does not satisfy the conception of IHEH and cannot be offered to students of other faculties or institutions. To promote the CCC course as a part of IHEH and to bring the course up-to-date, faculty should rethink the course design paradigm, moving from content coverage to the focus on student learning outcomes. It is necessary to do that as internationalisation at home approach requires that faculty members and administrators work collaboratively to design deliberate and meaningful spaces of integration, thereby creating international, intercultural, and global learning experiences for all students. These actions will lead to the settlement of a conflict between the contemporary and the traditional approaches.

On the way to redesigning internationalisation at home through a Cross-Cultural Communication Course

To prepare students for the twenty-first century, institutions of higher education are engaging in multiple strategies to provide students with global competencies that are aligned with new professional requirements and heightened citizenship expectations. Traditional strategies have involved programmes of student mobility through such pathways as bringing international students in and sending home students abroad. There are, however, increasing demands that institutions look inward to renew curricula and extra-curricular programming to reflect new paradigms for global knowledge production and learning.

For that reason higher education institutions in Russia establish English-medium programmes and courses in order to produce graduates who can contribute to the global workforce, and promote international profile of the institution.

Internationalisation on the level of the university is the process of transformation of the national university into the international one, inclusion of

the international aspect into all the spheres of its activity in order to improve the quality of educational process and scientific research. To do that, Samara State Technical University joined the project "Entrepreneurs for Tomorrow" (within the framework of TEMPUS IV grant) and established a new Master programme for Sustainable Entrepreneurship in the Volga Region (Russian Federation). Its main objective was to contribute significantly to a sustainable economic development of this region at grassroots level with an important emphasis on sustainable development (people-planet-profit). The students who were involved into the programme have to develop essential skills how to set up a new company or how to work successfully in the growing number of Small-and-Medium Enterprises in the region. Besides, this project was considered a major part within the university internationalisation programme.

There were different activities organized for students who participated in the project: they attended partner institutions, had mutual one-line courses with students from other Russian and European universities, worked under the supervision of tutors from partner institutions and so on. They also had courses taught by European professors in English. One of them was a Cross-Cultural Communication course.

In designing this CCC course, the staff made an attempt to provide some insights on dealing with people from different cultural backgrounds. Thus, this subject course "Cross-Cultural Communication" aimed to help students not only learn distinctive cultures and different cross-cultural communicative patterns and skills, but use the target language meaningfully, and thus accelerate acquisition.

The pedagogical approach in this course is Action Learning. The course programme was designed to develop maximum innovative and intercultural skills in students, enabling them to global environment effective communication and the ability to connect to other cultures. Their knowledge, skills and attitude were trained in an integrative way, with continuous reference to real-life situations. By putting real-life cases as the central themes in this course it was ensured that students were optimally prepared to learn theory and practice.

Besides, unlike courses, traditionally designed by Russian Universities, during this course much attention was paid to Non-verbal communication (NVC). The key message of the course was "Words exist to make your thoughts unacceptable for people". Words account for 7 % of a message as far as feelings and attitudes are concerned. NVC or body language account for 38 % of a message. Facial expressions account for 55 % of a message. In other words, the actual words we use are less important than the way in which we say things. And the manner of speaking as well as a body language differs in different cultures. The same is true about the way we do business. So, in this course students were taught how people convey meaning in NVC through their posture, gestures, eye contact, physical distance they keep when communicating and how they dress.

Still, this course lacked linguistic aspects though students hoped to improve their language competencies as well.

We realize that only a combination of these two courses best practices – a linguistic approach and Action learning + NVC – would stimulate development of IHEH mindset that, in its turn, would encourage the development of global competencies in students. Ideally, at the end of this process, the CCC course will align seamlessly course goals, authentic assessments, global learning outcomes, innovative and interactive pedagogies, engaging activities, and the production of knowledge.

Thus, we believe, that a key approach to the enhancement of IHEH in Russia will be through further development of the curriculum and learning outcomes. Elements of curricular change will include enhanced intercultural competences and global perspectives through better defined internationalised learning outcomes, better use of the increased diversity in the classroom, and stronger language acquisition. These developments will align with the internationalised curriculum, learning outcomes, assessment tasks, teaching methods and support services of a programme of study. They will also align with internationalisation at home as defined by Beelen and Jones (Beelen & Jones, 2015): "The purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students within domestic learning environments."

Curriculum and course internationalisation demands that staff merge their disciplinary and professional objectives and means of analysis with global perspectives, skills, attitudes, and knowledge. Only then will a curriculum achieve global learning outcomes that are as meaningful for specific disciplines as they are for broader global competencies set forth by institutions. In other words, to increase intercultural communication, a successful cross-cultural teaching model should find the balance between theory and application.

Conclusion

In the broad definition of what internationalisation is, there are two key components in the internationalisation policies and programmes of higher education that are constantly evolving and becoming increasingly intertwined. One is internationalisation abroad, understood as all forms of education across borders: mobility of people, projects, programmes and providers. The other is internationalisation at home, which is more curriculum-oriented and focuses on activities that develop international or global understanding and intercultural skills.

This research demonstrates that Russian higher education nowadays has an international aspect, though organized differently than in other cultures. Internationalisation of higher education at home is a relatively new phenomenon

for Russia but, as a concept, it is one that is both broad and variable. At the same time, IHEH may launch a new era for Russian higher education, indeed making it part of global academia with no cultural boundaries or national borders.

The described implementation of internationalisation at home presents Russian university staff with an opportunity to enforce academic professionalism and promote their status in the world education market. A stronger focus on curriculum and learning outcomes is likely to encourage greater academic engagement in internationalisation.

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ИЗМЕРЕНИЕ И МНОГОФАКТОРНЫЙ АНАЛИЗ ПАТРИОТИЗМА СТУДЕНТОВ

Measurement and Multifactorial Analysis of Students' Patriotism

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Abstract. *The relevance of the work is based on internal and external causes. Internal reasons consist of the fundamental transformation and revaluation of values occurring in Russia. Patriotism is the foundation of responsibility for the preservation of spiritual values and the power of the country. External causes are the need to counter terrorism and conflicts in the world. The goal of the study is to measure the level of patriotism of students according to their gender, course, and department of the branch of Kuban State University in Slavyansk-on-Kuban. To accomplish this goal, it is necessary to assess the quality of the questionnaire as a measuring tool and measure the level of patriotism of students on a linear scale. The theory of latent variables is used as the method of research, allowing to measure the level of patriotism on a linear scale.*
Keywords: *patriotism; latent variable; measurement; multifactorial ANOVA; Rasch model.*

Введение
Introduction

Объектом исследования является уровень патриотизма студентов. Актуальность работы обусловлена внутренними и внешними причинами.

Внутренние причины вызваны фундаментальными преобразованиями и переоценкой жизненных ценностей происходящими в стране. Только на основе патриотизма появляется чувство ответственности за сохранение духовных ценностей и могущество страны, об этом свидетельствуют высказывания многих ученых "мы утверждаем, что чувство национальной гордости обусловлено политической и социальной средой. Когда американцы разделяют свои ценности, черты характера, гражданские позиции, они более склонны к проявлению гордости за свою страну" (Wolak & Dawkins), "… в Великобритании сегодня политики независимо от своей политической ориентации обращают внимание на школы, чтобы вдохновить и оживить сильное, современное чувство патриотизма, которое

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способно сплотить людей и мотивировать граждан к выполнению своих обязательств друг к другу и к государству" (Hand, 2011).

Внешние причины состоят в необходимости противодействия терроризму и конфликтам, происходящими в мире, "терроризм и конфликт обостряют эту дискуссию (о патриотизме), придавая ощущение неотложности как требованию любить свою страну, так и стремлению к личной свободе" (Ben-Porath, 2007).

Феномен патриотизма отличается многоаспектностью, разнообразием форм проявления, изменением отношения к нему со стороны различных социальных страт. С расширением социальных связей, увеличению влияния транснациональных компаний понятию «патриотизм» противопоставляется понятие «космополитизма». Существуют принципиальные различия между интересами транснациональных компаний и интересами общества. Все это обуславливает очень широкий спектр отношения к патриотизму – от признания высшего социального качества "патриотизм - важный индикатор политических установок и предпочтений" (Parker, 2009) до полного отрицания. Наиболее крайняя форма этого отрицания представлена в статье под красноречивым названием «Патриотизм – это последнее прибежище негодяя» (Russell & Toby, 2017). Такой широкий спектр мнений обусловлен тем, что между понятиями патриотизм и национализм существует тонкая грань, особенно очевидно это стало на примере так называемого Евромайдана (Kuzio, 2015).

Исследованию феномена патриотизма посвящены многочисленные работы, которые свидетельствуют об актуальности этого аспекта социальной жизни. Вот цитаты из некоторых работ "…мы должны признать правду о том, что справедливый патриотизм возможен, и мы должны стремиться уточнить его и обеспечить соответствующие условия" (Macedo, 2011), "можно выделить два варианта патриотизма: один абсолютный, другой зависящий от условий. ... мы заинтересованы в учете общего уровня патриотизма" (Nincic & Ramos, 2012), "… активизация патриотизма может мотивировать граждан к сотрудничеству с государством в достижении социальных целей …" (Gangl et al., 2015).

Новизна данного исследования состоит в том, что акцент сделан на измерении на линейной шкале уровня сформированности патриотических качеств. Объективные измерения необходимы для оценки эффективности воспитательных программ и анализа факторов, влияющих на сформированность патриотических качеств студентов.

Цель работы состоит в измерении и анализа патриотизма студентов в зависимости от их пола, курса и факультета. Для достижения поставленной цели необходимо решить следующие задачи:

- оценить качество опросника как измерительного инструмента для измерения уровня патриотизма студентов;
- провести анализ функционирования индикаторов опросника;
- измерить уровень патриотизма студентов;
- определить статистическую связь между уровнем патриотизма студентов и их полом, курсом и факультетом.

Патриотизм определяется операционально – с помощью набора индикаторов (Маслак & Минакова, 2007).

Данные
Data

Респондентами были студенты 1 – 4 курсов факультетов математики, экономики, филологии, биологии и педагогики филиала Кубанского государственного университета в г. Славянске-на-Кубани, всего 224 студента, среди них девушек 192, юношей 32.

Методология исследования
Research Methodology

Методической основой исследования является теория латентных переменных. Измерение патриотизма студентов осуществлялось в рамках теории измерения латентных переменных на основе модели Раша (Rasch, 1960). Эта теория показала свою эффективность не только в сфере образования, но и в других социальных системах для измерения латентных переменных (Maslak et al., 2005; Maslak et al., 2015; Сидоренко & Маслак, 2017a; Сидоренко & Маслак, 2017a). Отличительной особенностью этого подхода является то, что измерение латентной переменной осуществляется на линейной шкале, оценки индикаторов в порядковой шкале преобразуются в оценку латентной переменной на линейной (интервальной) шкале (Маслак, 2016). Это позволяет использовать широкий класс статистических процедур для анализа результатов измерения. Кроме того, обеспечивается высокая степень дифференциации измеряемых объектов (Maslak et al., 2017; Анисимова et al., 2003).

Результаты
Results

Для обработки исходных данных и оценки латентной переменной «Патриотизм» применялась диалоговая система «Измерение латентных переменных» (Маслак, 2016). Прежде всего, оценивалось качество

опросника как измерительного инструмента. Для оценки совместимости набора индикаторов, т.е. определения того, что все они характеризуют латентную переменную «Патриотизм», использовался критерий Хи-квадрат (Маслак, 2016). Эмпирический уровень значимости оказался равным 0,35, что превышает номинальный уровень значимости 0,05. Это свидетельствует о том, что индикаторы (пункты опросника) совместимы между собой и адекватны модели измерения. Это означает, что опросник можно использовать в качестве измерительного инструмента. Важным показателем качества опросника, а точнее эффективности измерений, является также степень дифференциации студентов по уровню их патриотизма. Этот показатель формализуется как индекс сепарабельности объектов или в переводе «person separation index» (Маслак, 2016). Индекс сепарабельности оказался очень высоким, он равен 0,884. Это означает, что опросник хорошо дифференцирует студентов по уровню их патриотизма.

Наиболее общие результаты измерения уровня патриотизма студентов представлены на рис. 1.

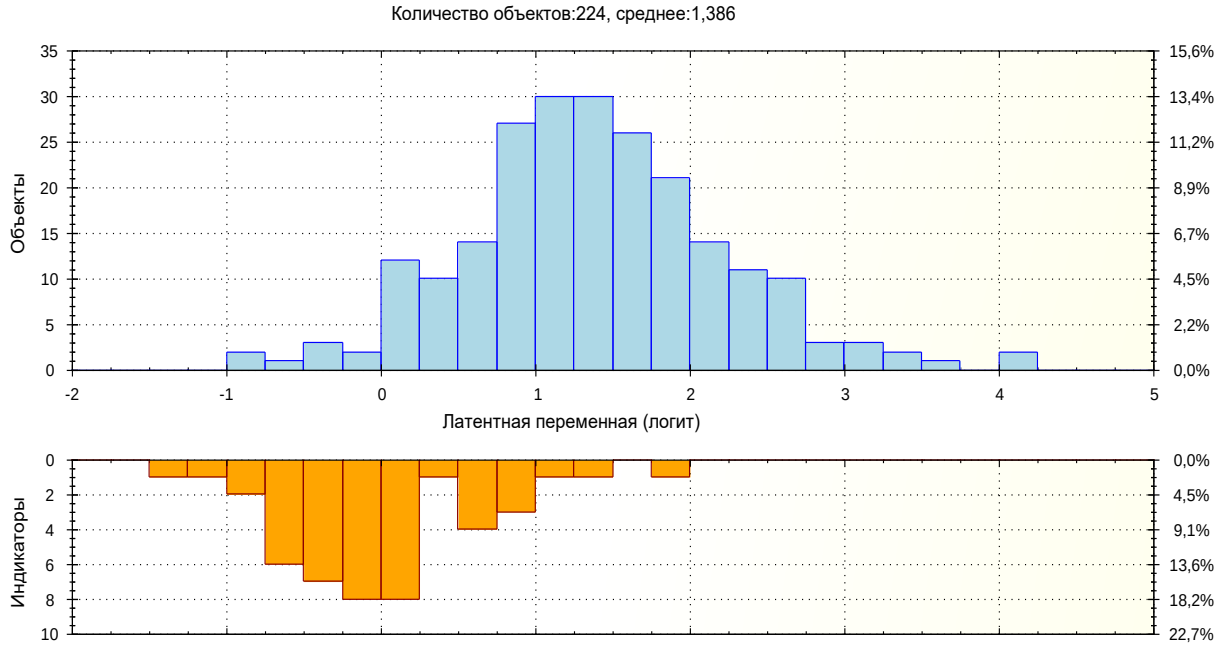

Рисунок 1. **Оценки патриотизма студентов**
Figure 1. ***Estimates of students' patriotism***

В верхней части рис. 1 показано распределение оценок патриотизма студентов, в нижней части рисунка - распределение оценок индикаторов на той же самой шкале. Здесь объекты обозначают студентов.

Информация, представленная на этом рисунке, позволяет сделать следующие выводы:

- диапазон варьирования патриотических качеств студентов очень большой – более пяти логит. Это свидетельствует о том, что студенты значительно различаются по уровню патриотизма.
- индикаторы варьируются в достаточно большом диапазоне – трех логит. Это означает то, что опросник позволяет измерять как низкие, так и высокие значения латентной переменной;
- между двумя этими наборами (оценками индикаторов и оценками студентов) существует смещение – различие между соответствующими средними равно 1,386 логит. Это свидетельствует о том, что уровень патриотизма студентов выше, чем предполагает опросник.

Для иллюстрации рассмотрим наиболее отличительные индикаторы:

- наиболее “легкий” индикатор, который лучше других дифференцирует студентов с низким уровнем патриотизма;
- наиболее “трудный” индикатор, который лучше других дифференцирует студентов с высоким уровнем патриотизма.

Поведение индикаторов описывается характеристическими кривыми, которые показывают, как значение индикатора зависит от измеряемой латентной переменной (Маслак, 2016). Характеристические кривые этих индикаторов представлены ниже.

Характеристическая кривая индикатора, лучше других дифференцирующего студентов с низким уровнем патриотизма

Таким индикатором является индикатор 47 «Горжусь историческими победами вооруженных сил России». Характеристическая кривая этого индикатора показана на рис. 2.

Структура рисунков с характеристическими кривыми подробно рассмотрена в (Маслак, 2016). По оси абсцисс расположены значения измеряемой латентной переменной (патриотизма). По оси ординат находятся значения индикатора. Отметим, что индикатор 47, так же, как и остальные индикаторы, варьируется на четырех уровнях: 0 - нет; 1 - скорее нет, чем да; 2 - скорее да, чем нет; 3 - да.

Характеристическая кривая этого индикатора принимает большие значения почти на всем диапазоне варьирования латентной переменной, это свидетельствует о том, что практически все студенты гордятся историческими победами вооруженных сил России. Наибольшая крутизна этой кривой находится в области низких значений латентной переменной, это и означает, что данный индикатор лучше других дифференцирует студентов с низким уровнем патриотизма.

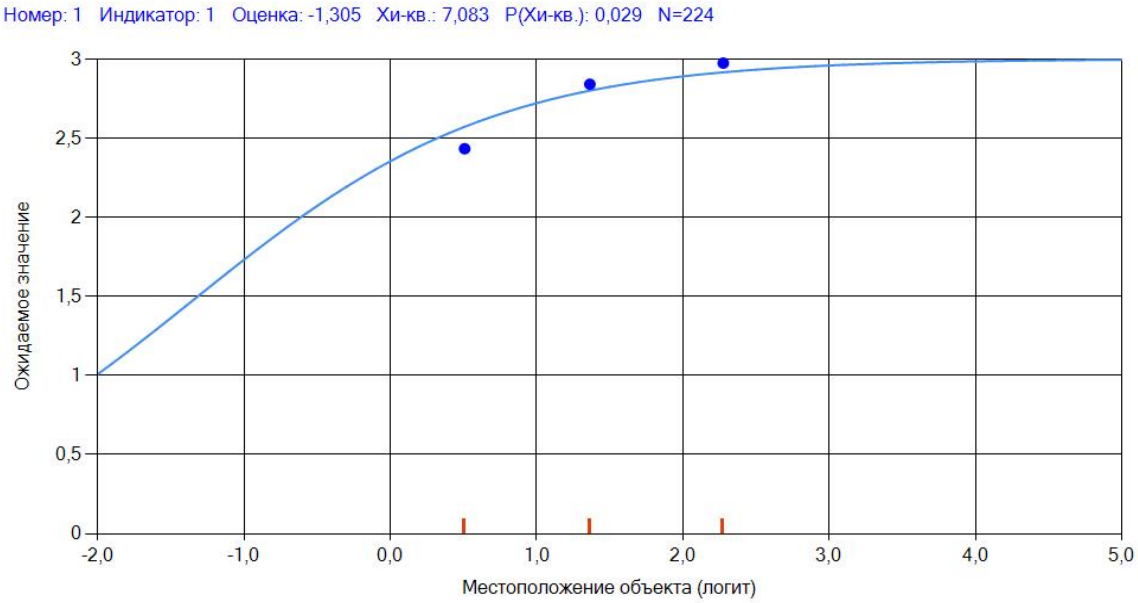

Рисунок 2. **Характеристическая кривая индикатора 47 «Горжусь историческими победами вооруженных сил России»**
Figure 2. ***Item characteristic curve for indicator 47 "Proud of the historic victories of the Russian armed forces"***

Характеристическая кривая индикатора, лучше других дифференцирующего студентов с высоким уровнем патриотизма

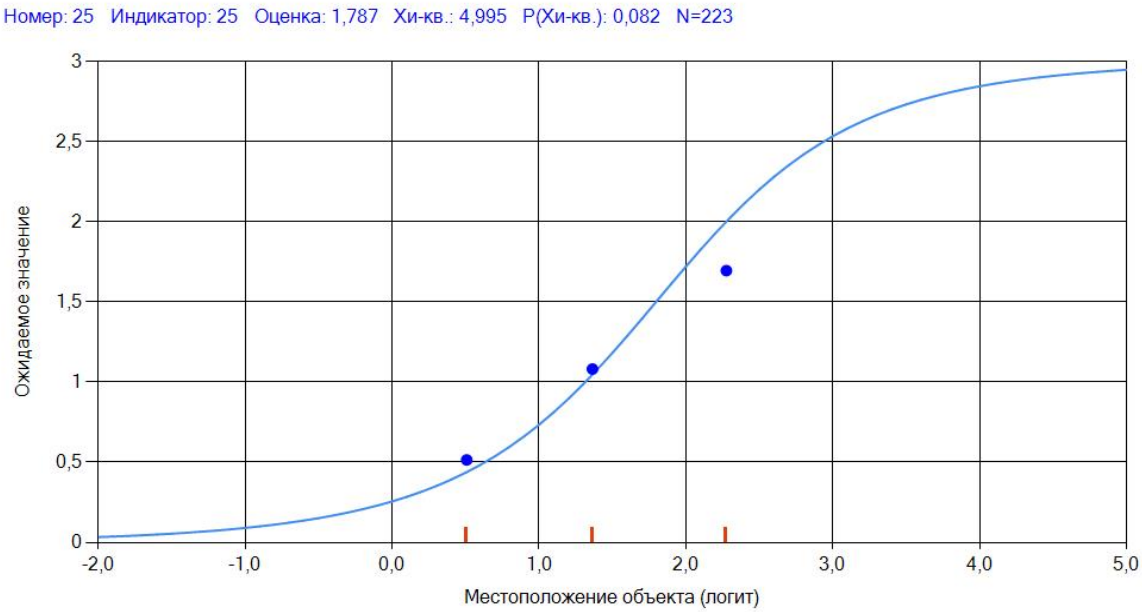

Рисунок 3. **Характеристическая кривая индикатора 43 «Патриотизм – это лишь романтический образ, литературная выдумка»**
Figure 3. ***Item characteristic curve for indicator 43 "Patriotism is only romance, literary fiction"***

Наибольший уровень патриотизма характеризует индикатор 43 «Патриотизм – это лишь романтический образ, литературная выдумка». Характеристическая кривая этого индикатора представлена на рис. 3. Как видно на этом рисунке наибольшая крутизна характеристической находится в области высоких значений латентной переменной. Это свидетельствует о том, что данный индикатор лучше других дифференцирует студентов с высоким уровнем патриотизма.

Statistical analysis of estimates of students' patriotism

Поскольку исследуемые факторы «пол», «курс» и «факультет» являются качественными, то в качестве метода обработки результатов измерения используется трехфакторный дисперсионный анализ.

В табл. 1 показаны результаты дисперсионного анализа уровня патриотизма студентов в зависимости от пола, курса и факультета.

Таблица 1. **Дисперсионный анализ оценок патриотизма студентов в зависимости от пола, курса и факультета**
Table 1 **ANOVA table for students' patriotism depending on gender, grade, and department**

Источник дисперсии	Сумма квадратов	Степень свободы	Средний квадрат	*F*	*p*
Факультет	10,206	4	2,551	3,931	0,004
Курс	1,912	3	0,637	0,982	0,402
Пол	0,106	1	0,106	0,163	0,687
Факультет * Курс	3,739	3	1,246	1,920	0,127
Факультет * Пол	8,435	4	2,109	3,249	0,013
Курс * Пол	0,142	2	0,071	0,110	0,896
Ошибка	133,060	205	0,649		
Всего	153,201	223			

Проинтерпретируем полученные результаты дисперсионного анализа. Из табл. 1 видно, что значимы только два источника дисперсии: фактор «Факультет» (p = 0,004) и взаимодействие «Факультет * Пол» (p = 0,013). В табл. 2 приведены средние оценки патриотизма студентов рассматриваемых факультетов

Таблица 2. **Оценки уровня патриотизма студентов в зависимости от факультета**
Table 2 ***Estimates of students' patriotism depending on department***

Факультет	Среднее значение (логит)	Стандартная ошибка (логит)	95% доверительный интервал	
			Нижняя граница	Верхняя граница
Математики	1,067	0,167	0,737	1,396
Экономики	1,335	0,213	0,915	1,756
Филологии	0,991	0,246	0,506	1,477
Биологии	1,571	0,204	1,167	1,974
Педагогики	2,173	0,278	1,625	2,721

Из табл. 2 видно, что наибольший уровень патриотизма у студентов факультета педагогики (2,173 логит), наименьший у студентов филологии (0,991 логит). Студенты факультетов математики, экономики и биологии занимают промежуточное положение.

Фактор «пол» незначим, поскольку эмпирический уровень значимости этого фактора (p = 0,687) больше номинального равного 0,05. Тем не менее, представляют интерес полученные оценки уровня патриотизма девушек и юношей (табл. 3).

Таблица 3. **Оценки уровня патриотизма студентов в зависимости от пола**
Table 3 ***Estimates of students' patriotism depending on gender***

Класс	Среднее значение (логит)	Стандартная ошибка (логит)	95% доверительный интервал	
			Нижняя граница	Верхняя граница
Девушки	1,364	0,080	1,207	1,521
Юноши	1,262	0,211	0,847	1,677

Данные приведенные в табл. 3 показывают, что уровень патриотизма в среднем по всем факультетам у девушек несколько выше (1,364 логит), чем у юношей (1,262 логит), но это различие статистически незначимо.

Представляет интерес взаимодействие «факультет * пол», поскольку оно оказалось значимым (p = 0,013). Соответствующие данные представлены в табл. 4.

Таблица 4. **Эффект взаимодействия факторов «факультет * пол»**
Table 4 ***Effect of interaction of factors "department * gender»***

Пол	Факультет				
	Математики	Экономики	Филологии	Биологии	Педагогики
Девушки	1,228	1,497	1,322	1,699	1,465
Юноши	0,852	1,254	-0,001	1,442	3,590

Эффект этого взаимодействия иллюстрируется на рис. 4.

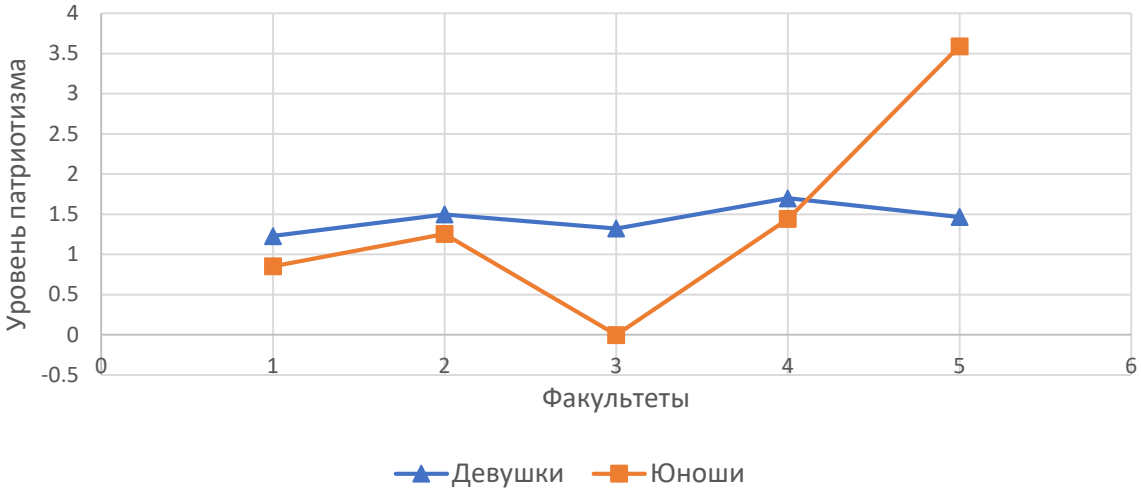

Рисунок 4. **Эффект взаимодействия «факультет * пол»**
Figure 4. ***Effect of interaction of factors "department * gender»***

На рис. 4 факультеты закодированы следующим образом: 1 - факультет математики; 2 - факультет экономики; 3 - факультет филологии; 4 - факультет биологии; 5 - факультет педагогики.

Эффект взаимодействия этих факторов проявляется в следующем. На факультетах математики, экономики и биологии девушки и юноши практически не отличаются по уровню патриотизма. Однако на факультете филологии уровень патриотизма юношей значительно ниже, чем у девушек, на факультете педагогики – наоборот, уровень патриотизма юношей значительно выше, чем у девушек. Это является важной информацией для оценки эффективности воспитательной работы в университете.

Выводы
Conclusions

1. Измерение патриотизма студентов осуществляется в рамках теории латентных переменных на основе модели Раша. Использованный в исследовании опросник обладает хорошей разрешающей

способностью, позволяющий измерять как низкие, так и высокие уровни патриотических качеств студентов.

2. Проведенный дисперсионный анализ оценок патриотизма показал, что уровень патриотизма у девушек и юношей практически один и тот же в среднем по всем курсам и факультетам. Однако на факультетах филологии и педагогики девушки и юноши различаются по уровню патриотизма.
3. Уровень патриотизма студентов не зависит от курса. Однако есть значимое различие между факультетами, наибольший уровень патриотизма у студентов факультета педагогики, наименьший у студентов филологии. Студенты факультетов математики, экономики и биологии занимают промежуточное положение. Все это свидетельствует о необходимости анализа и корректировки воспитательной работы в университете.
4. Необходимо подчеркнуть, что уровень патриотизма определяется операционально, т.е. через набор индикаторов. Очевидно, что индикаторы можно корректировать и таким образом уточнять смысл латентной переменной «патриотизм».
5. ПОЛУЧЕННЫЕ оценки уровня патриотизма являются важной информацией и могут быть использованы для оптимизации воспитательной работы в университете.

Summary

The relevance of the work is derived from internal and external causes. Internal reasons consist of the fundamental transformation and revaluation of values occurring in Russia. Patriotism is the foundation of responsibility for the preservation of spiritual values and the power of the country. External causes are the need to counter terrorism and conflicts in the world. The purpose of the study is to measure the level of patriotism of students according to their gender, course, and department of the branch of Kuban State University in Slavyansk-on-Kuban. To accomplish this goal, it is necessary to assess the quality of the questionnaire as a measuring tool and measure the level of patriotism of students on a linear scale. The theory of latent variables is used as the method of research, allowing to measure the level of patriotism on a linear scale. It is shown that the developed questionnaire has good differentiating ability, and it can be used as a measuring tool. Indicators vary within a sufficiently wide range that allows accurate measurements of both low and high levels of patriotic qualities. Comparison of estimates of patriotism of students according to their gender, year of study, and department was conducted using multifactorial analysis of variance. It is shown that there is a statistically significant difference between estimates of the level of patriotism of students of different departments. The level of patriotism of males and females is approximately the same. The factor “year of study” of students was also proved to be insignificant. The theoretical importance of the study consists in the formalization of the latent variable “patriotism” based on the set of indicators. Practical significance lies in the quantitative assessment of the level of patriotism of students and analysis of these results depending on their gender, year of study, and department.

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ОЦЕНИВАНИЕ ОБЩЕКУЛЬТУРНЫХ КОМПЕТЕНЦИЙ СТУДЕНТОВ

Assessment of Universal Competencies of Students

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Abstract. *Assessing the competencies of students is an important and challenging task. The article presents the experience of evaluating the universal competencies of students. We created individual and group exercises, criteria for evaluating the results of these exercises for assessing the universal competencies of students. In addition to expert evaluation, students were interviewed to identify their self-esteem. The created assessment tools were used for several years at the Faculty of Physics and Mathematics of the Pskov State University to assess the universal competencies of first year students (more than 200 students participated). Some research results are analyzed in the article.*
Keywords: *competence, learning outcomes, evaluation, assessment center.*

Введение
Introduction

Важной составляющей образовательного процесса является мониторинг качества освоения основных образовательных программ, оценка достигнутых результатов обучения. Представляется чрезвычайно актуальным поиск современных средств и технологий, которые бы позволили оценивать сформированность компетенции – многофакторной и интегральной характеристики, которая в основном проявляется в деятельности. Одним из таких методов является центр оценки, применяемый в сфере оценки персонала. Данный метод обладает высокой валидностью в целом, имеет высокую степень обоснованности критерия, уровень прогностической достоверности может варьироваться в зависимости от цели оценки, степени подготовки оценщика (Gaugler, 1987;

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Caldwell, 2003; Базаров, 2006; Hermelin, 2007; Барышникова, 2013). Современные представления о корректном использовании данного метода зафиксированы в Российском стандарте центра оценки, который учитывает российскую практику оценки и соответствует традициям отечественной теории и методологии научно-практических исследований и разработок (Вучетич и др., 2013).

Целью данной статьи является анализ опыта оценивания общекультурных компетенций студентов физико-математического факультета Псковского государственного университета с применением центра оценки.

В ходе исследования были использованы следующие методы: анализ научной литературы по проблеме исследования, центр оценки, анкетирование.

Материалы и методы
Materials and methods

На физико-математическом факультете Псковского государственного университета сотрудниками экспериментальной лаборатории проблем качества высшего образования в течение многих лет исследуются вопросы, связанные с формированием и оценкой результатов обучения. В частности, для оценивания общекультурных компетенций студентов применяется центр оценки (Медведева и др., 2012, 2014). «Центр оценки (ассессмент центр) – комплексный метод диагностики потенциальной успешности в профессиональной деятельности, включающий набор различных частных методов, основой которого является оценка поведения участников группой наблюдателей-экспертов в моделирующих упражнениях» (Вучетич и др., 2013). Ниже представлена последовательность этапов оценки сформированности общекультурных компетенций студентов и их краткая характеристика.

Подготовительный этап

Выделение перечня компетенций, подлежащих оценке.

Для оценивания отбираются общекультурные компетенции, присущие всем направлениям подготовки на факультете, это определяется образовательными стандартами по реализуемым образовательным программам.

Разработка моделирующих упражнений

Разрабатываются два типа моделирующих упражнений:

а) групповые упражнения,

б) индивидуальные упражнения.

Разработка критериев оценивания сформированности выделенных компетенций

Для каждой оцениваемой компетенции необходимо выделить уровни сформированности компетенций, например: низкий, средний, высокий. При разработке критериев для вывода об уровне сформированности выделенных компетенций можно использовать разные подходы:
1) критерии сформированности описать по всем трем уровням,
2) сформулировать критерии только для высокого уровня сформированности, а уже в зависимости от количества проявленных критериев определять другие, более низкие уровни сформированности.

Разработка протоколов наблюдения и оценочных бланков для наблюдателей.

Протокол наблюдения содержит графы: ФИО наблюдателя-эксперта, ФИО студентов, за которыми должен наблюдать эксперт, период наблюдения, результаты наблюдения.

Оценочный бланк содержит критерии по каждой из оцениваемых компетенций, прописанные по каждому уровню. Кроме этого, предусматривается графа, в которой эксперт имеет возможность оставить свои комментарии, сделать вывод об уровне сформированности компетенции.

Разработка анкет

При оценивании выделенных компетенций наряду с экспертной оценкой может использоваться самооценка студентов, для чего необходимо разработать анкеты.

Подготовка наблюдателей-экспертов

Для проведения центра оценки необходимо достаточное число наблюдателей-экспертов, которые должны пройти специальную подготовку.

После проведения всех составляющих подготовительного этапа назначается день проведения центра оценки, составляется расписание, которое сообщается студентам.

Проведение центра оценки

Организация деятельности наблюдателей-экспертов

В зависимости от разработанных групповых упражнений студенты делятся на группы, для наблюдения за каждой группой назначаются наблюдатели-эксперты.

Организация выполнения моделирующих упражнений

Для каждого упражнения назначается ведущий, который координирует выполнение моделирующего упражнения. Наблюдатели-эксперты заполняют бланки наблюдения.

Проведение анкетирования

Студентам предоставляется возможность пройти самооценку выделенных общекультурных компетенций.

Сведение оценок

На данном этапе проводится интеграция индивидуальных оценок, выставленных экспертами в ходе выполнения моделирующих упражнений.

Заключительный этап

Подведение итогов, информирование участников о результатах оценивания

На этом шаге ведущий подводил итоги центра оценки.

Обратная связь экспертов и студентов, индивидуальные консультации

Студентам предлагалось высказать свою точку зрения по результатам центра оценки, эксперты высказывали общие рекомендации по развитию общекультурных компетенций. В случае необходимости проводились индивидуальные консультации.

Результаты и их обсуждение
Results and discussion

Для оценивания общекультурных компетенций студентов первого курса физико-математического факультета центр оценки проводится ежегодно с 2012 года: на входном этапе в октябре и в конце первого курса, в мае.

Проанализируем некоторые результаты, связанные с подготовкой и проведением центра оценки.

Подготовительный этап

На физико-математическом факультете студенты обучаются по различным образовательным программам, поэтому авторами были выявлены компетенции, общие для всех направлений подготовки и которые преимущественно формируются на первом курсе: «Ведение дискуссии, полемики», «Совместная работа в группе», «Навыки публичной речи».

Одним из обязательных групповых упражнений являлась групповая дискуссия. Ежегодно моделировалась ситуация, которая становилась основой дискуссии и последующих групповых упражнений. При выборе тематики для групповых заданий учитывалась ее актуальность для студентов на данный момент. Например, в 2012 году было разработано групповое задание, основу которого составила статья «Земля столкнётся с «планетой дьявола» в 2013 году», взятая из новостного блока одного из поисковиков Интернета, содержащая информацию о несуществующей планете (Медведева и др., 2012). В 2014 году распоряжением

Правительства Российской Федерации был утвержден план мероприятий по поэтапному внедрению Всероссийского физкультурно-спортивного комплекса «Готов к труду и обороне» (ГТО). Поэтому в этом году была выбрана следующая тема групповой дискуссии: «Физмат навстречу ГТО». В ходе обсуждения первокурсники должны были высказать свое отношение к введению в России комплекса ГТО, всесторонне обсудить последствия его введения. В другие годы темы групповых заданий были следующими: «ЕГЭ: что делать?», «Зависимость – это хорошо или плохо?», «Создай экскурсию по Пскову», «На экологов надейся, а сам – береги!», «Узнай историю факультета, на котором учишься» и др.

Кроме этого, разрабатывались дополнительные групповые и индивидуальные упражнения для более точной индивидуальной оценки компетенций, в пилотной апробации которых участвовало около 20 % студентов.

Для оценивания выделенных компетенций были сформулированы критерии сформированности компетенций и описаны шкалы оценки. В таблице 1 представлен фрагмент оценочного бланка для наблюдателей-экспертов для оценки компетенции «Совместная работа в группе».

Таблица 1. **Фрагмент оценочного бланка**
Table 1 ***Fragment of the evaluation form***

Критерий	**Уровни сформированности**		
	низкий	**средний**	**высокий**
Участие в обсуждении и планировании работы группы	Мало участвует в обсуждении	Активно участвует в обсуждении, не участвует в планировании работы группы	Руководит работой группы, организует обсуждение, распределяет обязанности
Корректность поведения при работе в группе	Не всегда корректен в общении	Общается в основном в дружелюбной манере	Общается в доверительной и дружелюбной манере
Учет мнения других участников группы	Не учитывает мнения других участников группы	Выслушивает мнение других участников группы, но не всегда его учитывает	Выслушивает мнение других участников и учитывает их мнение

Для участия в центре оценки наблюдатели-эксперты прошли обучение, в ходе которого они научились отслеживать поведение участников во время проведения упражнений, регистрировать примеры поведения в протоколе наблюдения с последующей классификацией – отнесением описанных примеров поведения к соответствующим компетенциям, определять уровень выраженности компетенции на основе

шкалы. В роли наблюдателей-экспертов выступали сотрудники экспериментальной лаборатории проблем качества подготовки, а также магистранты, обучающиеся на образовательной программе «Современные средства оценивания качества результатов образования» (Митруничева & Тимофеева, 2015; Медведева и др., 2016).

Проведение центра оценки

Студенты распределялись в группы по 8-10 человек, каждая группа приходила на центр оценки в соответствии с расписанием. Центр оценки начинался с выступления ведущего, который объяснял цель и задачи мероприятия. Затем начиналась групповая дискуссия, которая длилась 20 минут. Эксперты наблюдали за участниками в ходе дискуссии, ведя записи в протоколах наблюдения.

Далее студенты распределялись в группы по 3-4 человека, каждой группе предлагалось задание. Формы представления результатов выполнения заданий были различны: презентации, буклеты, видеоматериалы, флешмобы. Например, студентам предлагалось разработать социальную акцию «Сортируй бытовые отходы!»; социальную рекламу в виде видеоматериала против интернет-зависимости, против курения; социальную рекламу в виде буклета, призывающую к занятиям физической культурой; флэшмоб «Мы за здоровый образ жизни!»; «Гид по университету», который помог бы студентам-первокурсникам и др. Для каждой формы были разработаны требования к выполнению задания, которые студенты получали вместе с заданием.

Для работы студентам были предоставлены компьютерные классы, в которых для выполнения задания можно было использовать Интернет, офисные средства и др. На выполнение заданий отводилось от двух до четырех часов.

В пилотной апробации часть студентов (около 20 %) проходила центр оценки, который включал в себя групповую дискуссию, рисуночное упражнение на командообразование, индивидуальные упражнения «Ораторское искусство» и «Работа с текстом», тестирование на выявление общих умственных способностей, анкетирование.

Рисуночное упражнение на командообразование «Государство» выглядело следующим образом:

В результате необычного происшествия Вы все вместе попали на неизвестную Землю параллельного мира. Чтобы выжить, Вам необходимо создать государство.

Вам решать:

- *какая форма правления будет в этом государстве;*
- *кто какую должность займет;*
- *чем вы будете заниматься и какие у кого будут обязанности.*

Вы должны будете прописать роль и должность каждого в Вашем государстве, описать Ваши обязанности, создать краткое описание государственного устройства и страны в целом. Создайте, пожалуйста, герб Вашей страны

Представьте результат графически.

В индивидуальном упражнении «Ораторское искусство» студент должен был подготовиться в течение одной минуты для выступления по одной из предложенных тем, например: «Один из самых ярких дней в моей жизни», «Мой первый день в университете», «Моя малая родина», «Легко ли выбрать профессию», «Человек – это его поступки», «Событие, которое меня поразило» и др.

Индивидуальное упражнение «Работа с текстом» было направлено на проверку способности интегрировать и интерпретировать сообщения текста, осмыслить и оценить сообщение текста, найти и извлечь из него информацию, использовать научные доказательства. Для этого было подобрано одно из заданий PISA для оценки читательской и естественнонаучной грамотности.

По истечении отведённого времени все группы собирались в одной аудитории, где представляли результаты своей работы. Ход итогового выступления групп также отражался экспертами в оценочных бланках.

Все студенты, участвовавшие в центре оценки, прошли анкетирование, в ходе которого оценивали степень выраженности у себя каждого из показателей проверяемых компетенций.

Так как в ходе центра оценки за каждым участником наблюдали от трёх до семи наблюдателей-экспертов (суммарно по всем упражнениям), было необходимо сведение оценок. В результате совместного обсуждения и согласования определялся уровень сформированности компетенции у каждого студента. Были подготовлены индивидуальные письменные отчеты по участникам пилотной апробации.

Заключительный этап

На заключительном этапе подводились итоги, эксперты высказывали мнение о работе групп, представляли интегральную оценку сформированности общекультурных компетенций, давали рекомендации по формированию оцениваемых компетенций. Студентам предоставлялась возможность в ходе обсуждения проанализировать деятельность своей группы, собственный вклад в работу группы, высказать мнение о результатах деятельности, представленных другими группами.

С каждым участником пилотной апробации была проведена беседа, в ходе которой рассказывалось о том, как он проявил себя в ходе выполнения моделирующих упражнений, давалась оценка сформированнности проверяемых компетенций, а также рекомендации по

дальнейшему развитию и совершенствованию компетенций.

Сравнение результатов самооценки студентов и экспертных оценок показывает, что самооценка 2/3 студентов согласуется с экспертными оценками, около 1/3 студентов оценивают себя несколько выше экспертной оценки.

Через два года после проведения центра оценки было проведено анкетирование этих же студентов (23 человека). Им было предложено оценить в баллах от 0 до 5 влияние на формирование общекультурных компетенций следующих факторов: изучение дисциплин, летняя практика, оценивание компетенций на первом курсе (центр оценки), участие во внеучебной деятельности и др. Результаты анкетирования о влиянии центра оценки представлены на диаграмме (рисунок 1).

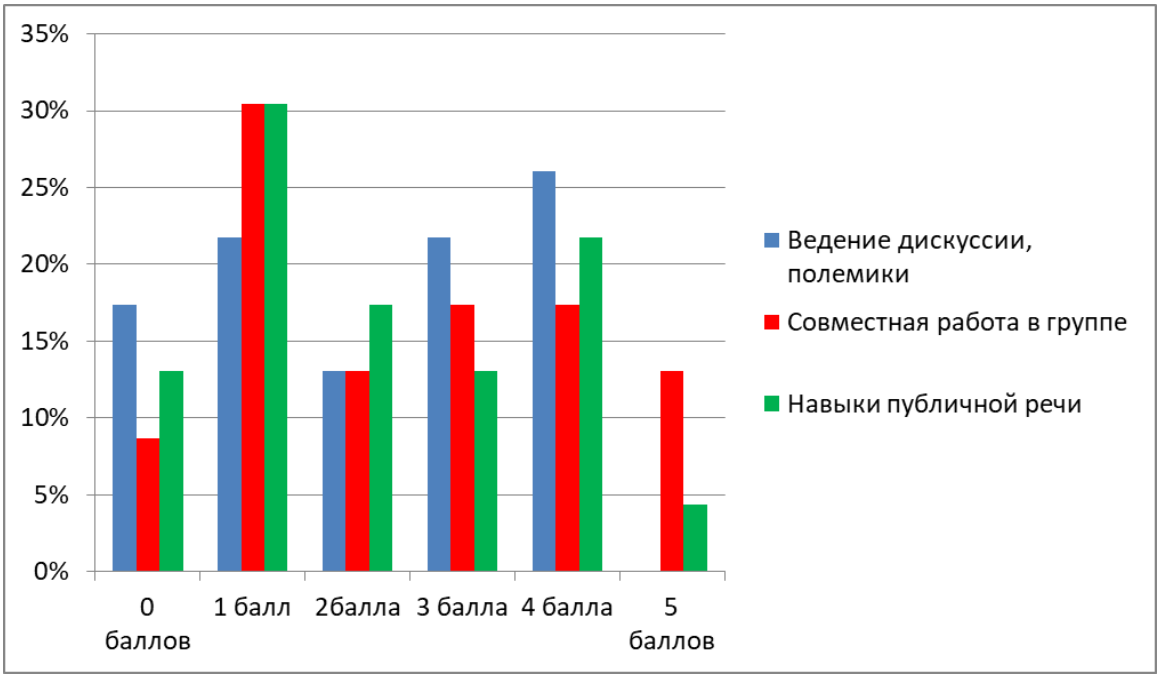

Рисунок 1. **Влияние центра оценки на сформированность общекультурных компетенций**

Figure 1. ***The influence of the assessment center on the formation of universal competencies***

На диаграмме видно, что от 9 до 17 % студентов по разным компетенциям посчитали, что центр оценки не повлиял на развитие компетенций (выставили 0 баллов). От 25 до 30 % студентов считают, что центр оценки оказал существенное влияние на развитие их компетенций (выставили 4 или 5 баллов). Таким образом, выявилось влияние центра оценки на развитие компетенций у студентов.

Выводы
Conclusions

Таким образом, центр оценки, являющийся методом комплексной оценки деятельности, может успешно применяться в образовании для оценки и развития общекультурных компетенций студентов, способствует подготовке активных успешных выпускников с более развитыми навыками командной работы, межличностной коммуникации, принятия решений, лидерских качеств.

Студенты-эксперты отметили, что участие в центре оценки заставило их более критично оценить сформированность компетенций у себя, мотивировало их на развитие отдельных составляющих общекультурных компетенций. Повысилась заинтересованность студентов по отношению к процессу обучения, к достигаемым результатам обучения, обучающая функция центра оценки проявилась не только для студентов, которые проходили оценку, но и для студентов, которые являлись наблюдателями-экспертами.

В ходе исследования выявились следующие особенности центра оценки в образовании: 1) предоставление студентам-участникам центра оценки возможности в ходе обсуждения проанализировать деятельность своей группы, собственный вклад в работу группы, высказать мнение о результатах деятельности, представленных другими группами; 2) обязательным элементом центра оценки в образовании должна быть самооценка компетенций студентами-участниками; 3) для студентов-экспертов участие в центре оценки служит поводом для переоценки своих компетенций и стимулом для их дальнейшего развития.

Таким образом, центр оценки в образовании можно применять как центр развития, что представляется весьма важным для формирования и развития общекультурных компетенций будущего выпускника.

Summary

The search for modern means and methods for assessing competences is an important task in the field of higher education.

The article contains an analysis of the experience of applying the assessment center in education for evaluating the universal competencies of students at the Faculty of Physics and Mathematics of the Pskov State University.

At the preparatory stage competencies are selected, the criteria for their evaluation are formulated, group and individual exercises, evaluation forms and protocols of observation, questionnaires are created.

The article describes the procedure for conducting an assessment center: the organization of student activities in group and individual exercises, the organization of the

activities of observers, the reconciliation of evaluations and the presentation of an integrated assessment of students' competencies. The exposition is illustrated by examples.

The results of the questioning of students showed that the self-esteem of most students is consistent with expert assessments. In addition, the positive influence of the assessment center on the development of universal competencies of students was revealed.

An analysis of the six-year experience of the assessment center allows authors to conclude that the assessment center can be used in education to assess and develop the universal competencies of students.

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OMBUDSMEN AS NATIONAL INSTITUTION FOR PROTECTION OF THE RIGHT TO EDUCATION IN UKRAINE

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Abstract. *Under the conditions of an armed conflict in Eastern Ukraine the level of ensuring the fundamental human right to education is being reduced. Therefore there is a need to search for additional mechanisms of the protection of the right to education, among which must be singled out such an extra-judicial human rights mobile institution as an ombudsman. All this stipulates the purpose of the article: to find out the role of the Ukrainian Parliament Commissioner for Human Rights, the Commissioner of Ukraine on the rights of the Child and the Educational Ombudsman to ensure the right to education in Ukraine. During the study, such methods as the analysis of scientific literature, normative legal acts in the field of the right to education and annual reports of the Ukrainian Parliament Commissioner for Human Rights were used. The research results of the Razumkov Center (Ukraine) regarding the attitude of citizens to the Ukrainian Parliament Commissioner for Human Rightshave been analyzed. As a resultit was discovered that the measures taken by the Ukrainian Parliament Commissioner for Human Rights and the Commissioner on the rights of the Child for the right to education are active and effective. In the society the legislative introduction of the post of educational ombudsman as an additional human rights institution in the field of education in Ukraine is positively evaluated. The conducted study shows that subsidiary, non-judicial means of protection of the right to education in Ukraine have greater authority among Ukrainian citizens than the judicial system.*
Keywords*: human rights, right to education, ombudsman, control, protection of rights.*

Introduction

Access to education in Ukraine is complicated by the on going armed conflict in the East of the state, which results in the destruction of educational infrastructure, the outflow of teaching staff, and the use of educational establishments for other purposes. According to the departments of education and science of Donetsk and Lugansk regional state administrations 119 educational establishments were damaged as a result of military actions in Eastern Ukraine on the territories under the control of the Ukrainian authorities (Lutkovska, 2017). There is a problem implementing the right to education for children who are internally displaced persons, as well as children living on the temporarily

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occupied territory of Crimea and uncontrolled territories of Ukraine in Donetsk and Luhansk oblasts (Mendzhul, 2017).

Under such conditions, the level of ensuring the fundamental human right to education in Ukraine decreases. Therefore, there is a need to search for additional mechanisms of protection of the right to education, among which must be singled out such an extra-judicial human rights mobile institution as an Ombudsman.

In Ukraine, for a long time, have been functioning such human rights institutions as the Ukrainian Parliament Commissioner for Human Rights, the Commissioner of the President of Ukraine on the rights of the Child. In order to further protect the right to education the new Law of Ukraine "On Education" introduced the position of Educational Ombudsman, but so far there is no practice of its activity, which increases the topicality of the research study. In this regard the problem under study leads to a considerable scientific interest in the study of issues related to the activities of ombudsmen in the field of education.

The analysis of literature shows that among scientists there is no unanimity regarding the assessment of human rights activities of the Ombudsman. Some of them consider it an effective human rights body that plays an essential role in ensuring human rights (Kovalsky, 2005) and "absolutely necessary" (Hill Robles, 2004). According to O. Martselyak, who comprehensively reviewed the legal nature of the Ombudsman, analyzed its features, functions and place in the mechanism of the state, the Ukrainian Parliament Commissioner for Human Rights is an important control and supervisory human rights organization (Martselyak, 2004).

More often, scientists appreciate the human rights role of the Ombudsman and point out that "he is a guarantee of democratic development of society" (Nikol'skaya, 2014). Rarely - qualify the Ombudsman's activity as a quasi-law-protecting, justifying it by his inability to implement a real, final, without the assistance of other state bodies, protection of a particular human and citizen's right (Pashuk, 2007).

The researchers also endorse the activities of the Ukrainian President's Commissioner on the rights of the Child and recognize that its implementation has become "an important area for improving the state policy on childhood protection" (Sirah, 2016; Fomenko, 2011).

The research of the scholars' works indicates that they emphasize the role of the Ukrainian Parliament Commissioner for Human Rights and the Commisioner of the President of Ukraine on the rights of the Child in the field of rights securement in general, but do not reveal the issue of guaranteeing the right to education. Exceptions are the works devoted to the Educational Ombudsman, which are still small in number. For now we can mention the research done by I. Khomyshyn (Khomyshyn, 2017).

The theoretical and practical significance of the Institution of the Ombudsman and the state of scientific research determine the purpose of the article: to find out the role of the Ukrainian Parliament Commissioner for Human Rights, the Commisioner of the President of Ukraine on Children's rights and the Educational Ombudsman to ensure the right to education in Ukraine.

During the research were used such methods as the analysis of scientific literature, normative legal acts in the field of providing the right to education and annual reports on the activities of the first Ukrainian Parliament Commissioner for Human Rights by N. Karpachova and the second - by V. Lutkovska. The results of the research of the Razumkov Center (Ukraine) regarding the attitude of citizens to the Ukrainian Parliament Commissioner for Human Rights, conducted from April, 21 to April, 26, 2017 were analyzed. 2018 respondents aged 18 and over were interviewed in all regions of Ukraine with the exception of Crimea and the occupied territories of Donetsk and Lugansk regions by sampling, which represents the adult population according to the basic socio-demographic indicators. The sample poll was developed as a multi-stage, random, with quota selection of respondents at the last stage (Results of the sociological survey, 2017). As a result of the sociological survey, it was found that the level of public trust to state institutions is extremely low. However, among the parliament, the president, the government, the prosecutor's office, the courts and the Ombudsman, the Ombudsman got the highest level of trust - 26.3 %. The lowest got courts - 9.3 %. Such results confirm our view of the relative credibility, independence of functioning and the mobility of human rights protection by the Ombudsman.

Commissioner of Verkhovna Rada of Ukraine on human rights

The development of democracy in Ukrainian society and the need to strengthen the protection of human rights in in conditions of military actions in the East of Ukraine predetermine public and state recognition, as well as the further development of the ombudsman institution.

Despite the fact that domestic legislation does not provide the ombudsman with adequate means of influencing those who violated the law to education, this human rights organization responds promptly to such violations. In exercising parliamentary control the Commissioner addresses to the relevant state authorities in order to ensure the effectiveness of the protection, and, as a result, a positive result is achieved in most cases. There are many examples of such appeals by the ombudsman. In particular: to the prosecutor with a request to verify compliance with the legislation in the process of reforming the activities of institutions of extracurricular education, by the results of which a decreeis issued on the elimination of violations of the law, which provides an attendance of teen clubs; to the Ministry of Education and Science of Ukraine and to the Fund for the Social

Protection of Disabled Persons in order to protect the right to education for students with disabilities, as a result of which additional places of state order are allocated for the completion of training of these persons; to the Ministry of Education and Science of Ukraine according to the results of the monitoring of the entrance campaign as for the introduction of an additional session for entrants who for various reasons did not pass the test, etc (Karpachova, 2010).

In total, during the year 2016, the Commissioner of Verkhovna Rada of Ukraine on Human Rights received 175 appeals concerning the protection of the right to education. Analyzing the subject of appeals, it is possible to divide them into the following groups:most relevant were the issues of violation of the rights to education (including higher education) – 34 %, the second place is taken by appeals about the reduction of the network of educational institutions (including their reorganization and liquidation) – 9 %, also not single ones are appeals for a decent attitude by teachers and violence in educational institutions – 8 %, granting privileges – 7 %, transportation of children to educational institutions – 6 %, placement of children in pre-school educational institutions (including those without vaccinations) – 4 %, choice of language of education – 3 %, other issues - 29 % (Lutkovska, 2017).

Practice of the Ombudsman activity in the field of the protection of the right to education shows that, in some cases, his efforts are effective in situations where the use of other means does not bring the expected results. Thus, proceedings in case of violation of rights to education, respect for human dignity and personal safety of students of one of the educational establishments, it was difined that its leadership, in violation of the requirements of the current legislation, there were expelled seven juvenile freshmen. In an illegal way, without properly examining the circumstances of the conflict situation on the basis on non-statutory relations, young men were threatened to sign a report on resigning on their own. Only after the Commissioner began to protect the rights of cadets, at the order of the leadership of the Armed Forces of Ukraine, the freshmen were re-engaged in training.

The expediency of strengthening the position of the Commissioner stems from the content of Art. 55 of the Constitution of Ukraine, which recognizes this institution, along with courts and international human rights protection bodies, is an integral part of the system of protection of human rights and freedoms (The Constitution of Ukraine, 1996). The constitutional and legal status of the domestic Ombudsman causes formation of a strong model in Ukraine.

Such characteristics as independence in the system of state bodies, openness, lack of formalized procedures for reviewing appeals, and free provision of assistance - contribute to strengthening the authority of the Commissioner's institution in the system of guarantees of legal protection. This explains people's

trust in Ombudsman, the annual submission of appeals to him to protect the violated right to education.

Note that in almost all countries a person has the opportunity to directly file complaints with the Ombudsman. Except that the "parliamentary filter" exists in the UK and until the constitutional reform of 2008 existed in France. We positively evaluate the possibility of personal appeal to the Commissioner not only the citizens of Ukraine, but also foreigners, stateless persons and their representatives. After all, the direct contact of people with Ombudsman characterizes the protection of the right to education as accessible. The availability of protection is one of the conditions for its effectiveness. It is that: 1) the person must be able to use the proposed method of protection personally, and not resort to the mediation of another body with discretionary powers; 2) this opportunity should not be complicated; 3) it must be real, not declarative, purely theoretical (Pashuk, 2007).

According to the legislation of Ukraine, the Commissioner carries out his activities on the basis of information about the violation of the right to education, which is received not only from written appeals of other subjects, but also on his own initiative. In addition, he draws such information from the media and takes appropriate measures of response.

An important means of parliamentary control over observance of human rights is the annual and special reports of the Commissioner. Their comparative analysis gives grounds for stating that, as a rule, the content of the Ombudsman's defense of the right to education is reduced to the requirement to stop the reduction of educational institutions, to ensure the possibility of realization of the right to education by pupils of secondary schools and children in need of social assistance and rehabilitation, the use of textbooks by pupils, teaching aids, methodical advice, liquidation of debt in scholarships payment and financial support to students, cadets, etc.

Analysis of Valeriya Lutkovska's report on the state of observance of human rights and freedoms in Ukraine in 2016 testifies about numerous inquiries concerning the violation of child's rights by teachers and violence in the educational institutions (Lutkovska, 2017). Thus, on the initiative of the Commissioner, proceedings were opened on the basis of monitoring activities, as a response to the placement in the media of video footage of a situation that arose in one of the schools in Ukraine, where the English teacher was accused of contemptuous attitude towards students. At the request of the Commissioner, an official investigation was conducted, the results of which brought to dismissal of the teacher.

The issue of ensuring the right to education for children with severe visual impairment and, above all, the possibility of their participation in external independent assessment and entrance exams was not out of sight of the

Commissioner. In an appeal to the Minister of Education and Science of Ukraine on the above-mentioned occasion, the Commissioner stressed that a blind person, who has not been created proper conditions for taking of the EIT, has no opportunity to choose between educational institutions, which places people with visual impairment in a significantly worse situation than others entrants. In the opinion of the Commissioner, the only rational solution to this issue, given that such persons use Braille font during the training, is the development of materials for the preparation and the very test of the EIT in Braille.

The above convincingly provess that, despite the absence of its own imperative methods of influencing the organs of state power and local self-government to stop the violation of the right to education, the ombudsman carries out such protection through alternative legal means. The effectiveness of the protection of the right to education provided by the ombudsman is determined by the independence and impartiality, accessibility and relative effectiveness of such protection.

Representative of the President of Ukraine on the rights of the child

The feasibility of functioning of the Ombudsman for the rights of the child in Ukraine is conditioned by a number of objective reasons - peculiarities of mental and physical development of children, impossibility of self-defense of their rights and legitimate interests, dependence on adults, absence of juvenile justice in the state, and threats related to military conflict in the east of the country.

In order to ensure the proper conditions for the implementation of civil, economic, social and cultural rights of children in Ukraine, taking into account the need for special care of a child, the implementation of Ukraine's international obligations in the field of child's rights and in accordance with the Article 102 of the Constitution of Ukraine (The Constitution of Ukraine, 1996) by the Presidential Decreefrom 11 August 2011, was introduced a position of the Representative of the President of Ukraine on the Rights of a Child (Decree of the President of Ukraine, 2011).

The main tasks of the Commissioner are: continuous monitoring of the observance of the constitutional rights of a child in Ukraine, the implementation of Ukraine's international obligations in this area and the introduction of proposals in the prescribed manner to the President of Ukraine on the cessation and prevention of repeated violations of children's rights and legitimate interests; Making proposals to the President of Ukraine on drafting laws and acts of the President of Ukraine on the rights and legitimate interests of a child; implementation of measures aimed at informing the population about the rights and legitimate interests of a child.

The Commissioner, in accordance with the tasks entrusted to him, has the right: to take, in due order, participation in the elaboration of draft laws, acts of the President of Ukraine on the rights and legitimate interests of a child; to visit special establishments for children, establishments for social protection of children and other institutions in which children are present, including places of detention, pre-trial detention, penitentiary institutions, psychiatric institutions, special educational institutions, interviewing persons, who are there and receive information about the conditions of their detention; apply to the state authorities for assistance in resolving issues that fall within the competence of the Commissioner; to receive in accordance with the established procedure from the state enterprises, institutions, organizations the necessary information, documents and materials, including those with restricted access, on issues that fall within the competence of the Commissioner; to involve, in case of necessity, in accordance with the established procedure, to working out of separate issues of representatives of state authorities, local authorities, associations of citizens, as well as experts, scientists and specialists, including those on a contractual basis; take, in due order, part in meetings of state bodies on issues that fall within the competence of the Commissioner; to apply to state bodies, including law enforcement agencies, regarding revealed violations of rights and lawful interests of a child; to study, according to the established procedure, the state of work on social and legal protection of children in institutions for orphans and children deprived of parental care, special institutions for children and institutions for social protection of children, the state of educational work with children in educational institutions; interact with organizations, including international ones, to protect the rights and legitimate interests of a child.

The analysis of the practice of the Ukrainian President's Office on the rights of a child testifies to his active position in the field of children's rights protection, including the right to education. This agency tested institutions and establishments for children, responded to a number of complaints and appeals, including the demand for money from parents for enrolling children in kindergartens, schools, violence in educational institutions, the need if establishment of inclusive education.

In our opinion, the recommendations of the Council of Europe on the improvement of the activities of the President of Ukraine on the rights of a child are valuable. Particularly noteworthy are the following: it is necessary to adopt a separate law that would increase independence of the children's ombudsman, expand his powers and provide additional funding (Lesko, 2015).

In general, it must be recognized that the activities of the President of Ukraine on the rights of the child provide additional state protection of the rights and interests of children, in particular the right to education.

Educational ombudsman

Given the importance of the right to education for everyone, society and the state, we believe that the functioning of such an institution as an educational ombudsman that protects the rights of school children and students is essential and appropriate. The activities of students' ombudsmen are not known in many countries, but such experience exists in Austria, the UK, the Netherlands, Russia, Canada, and the USA. In particular, in the Austrian Republic, in accordance with §31 of the Federal Law "On External Quality Assurance in Higher Education and the Agency for Quality Assurance and Accreditation Austria" of 29 July, the Institute of Students Ombudsman was also introduced (Federal Law on External Quality Assurance in Higher Education and the Agency for Quality Assurance and Accreditation Austria, 2011). It functions within the structure of the Ministry of Science and Innovation. Students Ombudsman is not an official body, it does not represent the legitimate interests of students in courts or other bodies of state power. In fact, the ombudsman serves as an information and service center for students. He studies their problems, provides advice on education, research, administrative services at an educational institution, etc. The ombudsman closely cooperates with student self-government bodies, with institutions whose competence concerns education. In his turn, he has the right to receive the necessary information and advice from educational institutions. The Student Ombudsman of Austria annually, no later than 15 December, reports on the results of its activities. The practice of student ombudsmen testifies that they serve as a means of reconciling those who exercise the right to education, teachers, and administration of an educational institution and is an alternative to the application of disciplinary penalties.

In the Russian Federation, the Office of the Commissioner for Student Rights was introduced at the federal level, and this human rights body also functions in the regions - in Tyumen, Chelyabinsk, Yaroslavl oblasts, St. Petersburg. Students' ombudsmen direct their activities to protect students' rights, develop self-governance in higher education institutions, improve legislation on higher education, and increase the legal culture of students.

In order to ensure proper conditions for the implementation of the right of a person to education, the Law of Ukraine "On Education" of 5 September 2017 introduced an educational ombudsman institution in the educational system (Law of Ukraine On Education, 2017). The Educational Ombudsman, in accordance with the tasks assigned to him, has the right: to consider complaints and to check the facts indicated in the complaints submitted by those obtaining the education, their parents, legal representatives, as well as pedagogical, scientific, pedagogical and scientific workers; to receive from educational institutions and educational

authorities information necessary for the performance of their functions, including information with restricted access; based on the results of the inspections to make a decision on the validity or ungroundedness of the complaint and, on the basis of it, to provide recommendations to educational institutions and educational management bodies, to inform law enforcement agencies of detected violations of the law; unhindered, in accordance with the procedure established by law, to visit state authorities, local self-government bodies, educational institutions of all levels, regardless of ownership, as well as to participate in established procedures at meetings of state bodies on matters within its competence; to apply to the government bodies, law enforcement agencies regarding revealed violations of human rights to education and legislation in the field of education; Provide counseling to education seekers, their parents, legal representatives, as well as trainees; represent the interests of a person in the court.

The Law of Ukraine "On Education" as a part of the activity of the Educational Ombudsman requires further implementation. The Educational Ombudsman will be appointed by the Cabinet of Ministers for a term of five years without the right to re-appoint. Currently, in order to ensure the functioning of this institution, it is necessary to create a service of an educational ombudsman in Ukraine and to determine the order of its activity in the appropriate legislation. In addition, the Cabinet of Ministers of Ukraine must approve the procedure and conditions for applying to the Educational Ombudsman.

Thus, normalization of activities of the educational ombudsman, in particular his rights and obligations, acquisition and termination of powers, order of application, guarantees of activities, will bring significant benefits to Ukrainian society in the full realization of the right to education. Functioning of this institution as a part of the Government of Ukraine will strengthen its law-enforcement function.

Conclusions

As a result of the study it was established that the measures taken by the Ukrainian Parliament Commissioner for Human Rights and the Commissioner on the rights of the Child for the ensurance of the right to education are active and effective. Among the higher authorities Ukrainian citizens demonstrate the highest level of trust to the Ukrainian Parliament Commissioner for Human Rights. In the society the legislative introduction of the Education Ombudsman position as an additional human rights institution in the field of education is commendable. At the same time the norms of the Law of Ukraine "On Education" as part of the activity of the Educational Ombudsman need to be implemented. The study shows that subsidiary, non-judicial means of protection of the right to

education in Ukraine have greater authority among citizens than the judicial system.

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ЛИНГВОКРАЕВЕДЧЕСКИЙ КОМПОНЕНТ ПОДГОТОВКИ УЧИТЕЛЯ-СЛОВЕСНИКА (СОДЕРЖАНИЕ, ФОРМЫ И СРЕДСТВА РЕАЛИЗАЦИИ)*

A Regional Linguocultural Component of Training Language Teacher (Contents, Forms And Means Of Implementation)

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Abstract. *The article presents the author's concept of forming the regional cultural linguistic competence of language teachers in the process of study in pursuit of Bachelor's and Master's degrees. It regards the optimal structure and contents of the regional cultural linguistic competence, the forms and means of the implementation of the regional linguocultural component of teachers'professionaltraining. It shows different types of students' in- and out-of-class activities and research projects connected with studying regional cultural linguistics, new models of modern means of teaching – the author's textbooks and educational dictionaries that provide the implementation of the concept. The results of the methodical experiment that prove the effectiveness of the author's model of forming the regional cultural linguistic competence of language teachers are given.*
Keywords: *High school pedagogics, teacher's professional competence, regional cultural linguistics, regional cultural linguistic competence, methods of teaching regional cultural linguistics.*

Введение
Introduction

Процесс профессиональной подготовки учителя-словесника в региональном вузе, обеспечивающем местные потребности в учительских кадрах, предполагает формирование у студентов лингвокраеведческой компетенции, реализация которой в их будущей профессиональной деятельности позволит эффективно использовать культурологический потенциал регионально маркированного языкового материала, осуществлять лингвокраеведческий подход в обучении языку.

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Лингвокраеведение как научное направление активно развивается в России с середины90-х г. прошлого века на базе интеграции краеведения, региональной лингвистики и лингвокультурологии, основные положения которой ипослужили теоретико-методологической основой лингвокраеведения как самостоятельного междисциплинарного научного направления.

В качестве объекта лингвокраеведения основательно исследована лексика и фразеология народных говоров, описана ономастика различных регионов России. Что касается методики учебной репрезентации лингвокраеведческого материала, то она в основном ориентирована на контингент школьников: разработаны рекомендации по проведению уроков литературы и русского языка на краеведческом материале, внеаудиторных мероприятий лингвокраеведческой направленности, моделейреализации научно-исследовательских лингвокраеведческих проектов школьников (Ивашкина, 2016; Шарова, 2016; Лекарева, 2011).

Лингвокраеведческие разработки для вузов–экспериментальные учебные курсы, словари и пособия, созданные в Москве, Санкт-Петербурге, Пскове, Владимире и других городах (Никитина, 2015; Доминова, 2012; Кожевникова, 2014), большей частью адресованы иностранным студентам и ставят своей целью их социокультурную адаптацию в регионе обучения.

Лингвокраеведение в системе подготовки учителей-словесников (бакалавриат и магистратура педагогических и филологических профилей), как правило, представлено дисциплинами вариативной части учебного плана («Лингвистическое краеведение», «Краеведение и лингвокраеведение», «Региональная лингвокультурология» и т.п.), которые, в соответствии с авторскими концепциями, либо нацелены на формирование у студентов навыков лингвокультурологического анализа регионального языкового материала (Мурзина и др., 2012), либо знакомят будущих учителей с принципами организации музейной и экскурсионной деятельности (Ерохина, 2016), чем далеко не исчерпывается проблематика лингвокраеведческой работы в школе.

Таким образом, обучение методике лингвокраеведческой работы будущих педагогов остается лингвометодической проблемой, не разработанной в теоретическом и практическом плане, как и комплексная проблема формирования и реализации лингвокраеведческого компонента в вузовской подготовке учителя-словесника. Подход к решению данной проблемы, реализуемый в Псковском государственном университете, представлен в данной статье.

Лингвокраеведческая компетенция учителя и языковой ресурс ее формирования
Regional cultural linguistic competence of the teacher and the language resource of its formation

Научная новизна предлагаемой методической концепции заключается в комплексном подходе к формированию, структурированию и реализации лингвокраеведческого компонента подготовки учителя-словесника, что обеспечивается обращенностью концепции к различным педагогическим профилям и уровням обучения будущих учителей-словесников, привлечением регионально маркированного материала различных языковых уровней, а также интеграционным характером моделирования процесса формирования лингвокраеведческой компетенции в рамках учебного плана.

Первоочередной задачей при разработке общих положений нашей методической концепции было определение структуры и содержания лингвокраеведческой компетенции учителя-словесника.

Формирование лингвокраеведческой компетенции чаще исследуется применительно к контингенту иноязычных обучающихся и рассматривается как одна из основных задач их обучения русскому языку. Лингвокраеведческая компетенция трактуется при этом как «составляющая коммуникативной компетенции с учетом условий места проживания и обучения» (Доминова, 2012: 44), а в ее содержание включается система знаний о локальной культуре, извлеченных из языковых единиц, обладающих регионально-культурной коннотацией, а также совокупность лингвокраеведческих умений, позволяющих осуществлять речевую деятельность на русском языке в социокультурном пространстве региона, города (Некипелова, 2001: 12). В отличие от этой прагматически ориентированной трактовки и коммуникативно направленного формирования лингвокраеведческой компетенции иностранцев, в школьной практике акцент обычно делается на знаниевом компоненте компетенции – освоении школьниками историко-культурной информации, сосредоточенной в семантикелексических регионализмов, местного литературного и фольклорного текста (Матова, 2015; Седова & Конных, 2017).

Профессиональная лингвокраеведческая компетенция учителя-словесника помимо этих фоновых регионально детерминированных знаний включает, по нашему мнению, и методический знаниевый компонент: терминологический аппарат и основные положения лингвокраеведения – критерии отбора и принципы лингвокультурологического анализа краеведчески ценного языкового материала, теоретико-методологические

основы учебной репрезентации данного материала определенному контингенту обучающихся, методика организации аудиторной и внеаудиторной лингвокраеведческой работы на разных уровнях обучения. В структуру лингвокраеведческой компетенции учителя-словесника мы включаем также и соответствующие профессиональные навыки: распознавания лингвокраеведчески ценных языковых единиц, выявления их регионально-культурных коннотаций, лингвокультурологического комментирования регионального материала, его лексикографической интерпретации, а также владение методами и приемами ведения лингвокраеведческой работы на уроке и в рамках внеаудиторных мероприятий, навыками организации научно-исследовательской деятельности обучающихся.

Для каждого из перечисленных выше параметров лингвокраеведческой компетенции были определены оптимальные условия и ресурсы формирования, которые и составили содержание, формы и средства реализации лингвокраеведческого компонента обучения будущих учителей-словесников. Эффективность разработанной концепции проверялась в ходе масштабного методического эксперимента, проводившегося в 2015-2017 г. кафедрой теории и методики гуманитарного образования Псковского университета в группах бакалавров профиля «Начальное образование», «Филологическое образование», «Русский язык как иностранный» и магистрантов профиля «Теория и методика обучения русскому языку как неродному».

Введение в учебные планы этих профилей дисциплины «Лингвистическое краеведение» позволило студентам освоить теоретические основы лингвокраеведения, осмыслить его междисциплинарный характер (интеграция региональной лингвистики, истории края, культурологии, этнографии, географии региона). В ходе изучения дисциплины студенты получили представление о языковых ресурсах лингвокраеведения, о базовых категориях и основных принципах лингвокультурологического анализа регионально маркированной лексики и текста, обогатили свой лингвокраеведческий кругозор конкретным культурно-историческим материалом, отраженным в региональной ономастике, пословицах и поговорках, фольклорных текстах.

Навыки распознавания лингвокраеведчески ценных языковых единиц и выявления их регионально-культурных коннотаций, совершенствовались на элективных курсах «Пословицы и поговорки Псковской земли», «Городские названия в лингвокраеведческом аспекте», «Топонимия Псковского края: историко-этимологический анализ» и др.

Приведем образцы выполнения этимологических заданий, позволивших студентам увидеть в псковской топонимии отражение древних межъязыковых и межэтнических контактов балтов и славян (работа выполнялась с опорой на "Словарь балтийских географических апеллятивов" (Невская, 1972) и современные двуязычные словари):

«Названия многих деревень на Псковщине имеют балтийские корни, их можно связать с соответствующими балтийскими словами: деревня *Кулье* – с литовским диалектным *kulis* (камень, валун). Деревня *Грабово*: в словаре Л. Г. Невской название связано с литовским *grabe* (ров, канава, овраг), можно связать и с латышским *grāvis* (ров, канава)».

«Название деревни *Галуха* в Опочецком районе, по мнению Л. Г. Невской, связано с литовским диалектным *galùkalnė* (место под горой); в современном литовско-русском словаре находим еще несколько слов с компонентом *galù*: *galùkaimas* – (окраина деревни), *galùlaukė* (окраина поля), подтверждающих эту версию».

Псковские городские названия имеют более прозрачные мотивировки. В ходе их анализа в рамках элективного курса студенты осваивают лингвострановедческую классификацию лексики (по мотивам номинации), которая оказывается релевантной и для регионально маркированного материала. Устанавливая связи городской топонимии с культурой и историей страны и региона, студенты учатся выявлять лингвокраеведческий потенциал ономастических регионализмов, формировать тематические подборки наименований, например, для серии школьных лингвокраеведческих словариков: «Древняя история Псковской земли в городских названиях» (*улица Александра Невского, Ольгинская набережная, Довмонтов город, улица Воеводы Шуйского* и др.), «Имена великих земляков на карте Пскова» (*улица Софьи Ковалевской, улица Спегальского, улица Брадиса* и др.), «Природа северо-запада России в топонимии Пскова» (*улица Боровая, улица Сосновая, улица Ромашковая, Хвойный переулок* и т.п.), «Псков литературный в городских названиях» (*улица Алтаева, улица Пушкина, улица Некрасова* и др.).

Городские топонимы с их легко осознаваемой внутренней формой являются, по нашему мнению, наиболее подходящим материалом для отработки навыков лингвокультурологического анализа, т.е. выявления культурного компонента семантики языковых единиц, по следующему алгоритму: для анализа из составного топонимического наименования выбирается собственно ономастический элемент, устанавливается его исходная форма – мотивационная база (*Довмонтов → Довмонт, Ромашковая → ромашка*), по словарям – энциклопедическим, культурологическим, лингвистическим – устанавливаются культурные

смыслы мотивирующей базы в общем контексте локальной и общерусской культуры и истории.

Элективные курсы, расширяющие лингвокраеведческий кругозор студентов и формируюшие аналитические навыки, позволяют получить в качестве продукта исследовательской деятельности не только топонимический краеведческий портрет города, но и психологический портрет носителя русской лингвокультуры в ее региональном воплощении. Так, освоив приемы описания аксиологем русских пословиц (элективный курс «Пословицы и поговорки Псковской земли»), студенты выявляют приоритеты народного сознания, отраженные в псковском паремиологическом материале, собранном в «Словаре псковских пословиц и поговорок» (Мокиенко & Никитина, 2001). Приведем фрагменты зачетных работ:

«Тему образования, учебы отражают прежде всего общерусские пословицы, зафиксированные на Псковщине. Основная идея, которую они передают: «Знания – жизненно необходимы человеку»: *Учиться – в жизни пригодится; Ученье – свет, а неученье – тьма*; есть и чисто псковский вариант этой пословицы: *Наука – свет, а безнаучность – тьма*».

«Русские пословицы рекомендуют человеку учиться постоянно: *Век живи – век учись*, *Учиться никогда не поздно*, а псковская пословица советует быть трудолюбивым, усидчивым в учебе: *Учиться – [так] не лениться.* И еще очень современная мысль в псковской пословице XVIII века – необходимый опыт можно получить на рабочем месте, на практике можно многому научиться: *Тесто насыщает, а место научает*».

Культурологически ценный языковой материал изучается не только на таких лингвокраеведчески ориентированных спецкурсах, но и дозированно включается в учебный материал на занятиях по современному русскому языку (разделы «Лексикология», «Фразеология»).

Текстовый региональный материал – фольклорный и авторский художественный текст – также может быть фрагментарно представлен в общих курсах устного народного творчества, детской литературы, русской литературы XIX-XX века. Так, на занятиях по лингвистическому анализу текста студенты реконструируют образ города Пскова в интерпретации псковских поэтов (задание выполняется на материале подборки стихов М. Шкапской, М. Львова, И. Слепнева, В. Степанова, Н. Алексеева, В. Половникова, О. Тиммермана, Е. Борисова, М. Гайдука, Н. Иванова, В. Игнатьевой, Р. Микрюкова, Н. Мишукова, И. Панченко, Е. Родченковой, О. Соловьевой).

В ходе анализа выясняется, что Псков в поэтическом тексте это древний, старинный город (определение *древний* повторяется в

анализируемом материале 17 раз, *старинный* – 7 раз). Мотив «возраста» Пскова актуализируют и такие его характеристики, как *древнерусский город* (М. Львов «В Пскове»), *летописцами воспетый* (В. Степанов «О Пскове»). Псков – город, хранящий «в душе преданья, легендарные сказанья, старины отсвет седой» (В. Степанов). Одиннадцать веков Пскова упоминает Николай Мишуков, провозглашающий тост за родной город в своем стихотворении «Пскову». В поэтические произведения включаются исторические сцены: «Здесь о Руси задумывался князь, шумело вече» (И. Слепнев), «Если гневно бунтует вече, значит, снова жалует гостей» (Е. Борисов).

Псков в истории России – это город-воин, опаленный в жарких битвах, но не покорившийся врагу (В. Степанов), город-крепость, защитник пограничных рубежей (Р. Микрюков). Образ города-воина актуализируется в конструкциях обращения к Пскову, например, у О. Тиммермана:

Псков мой – старый воевода, В русых кудрях серебро.
С незапамятного года: Что ни камень – то ядро.

Современный Псков, это город, где «день сегодняшний, день вчерашний ... на улицах время свело» (Н. Иванов). Его топографическое пространство представлено в поэтических произведениях местных авторов названиями улиц, крупных городских районов и гидронимами – названиями рек Великой и Псковы, у слияния которых и построен город. Здесь у мирно текущей реки в сознании поэта возникает ассоциация Псков → Пушкин:

И течет она у ног, тихая, послушная,–
То Великая-река, что знавала Пушкина. (М. Гайдук. Псковская земля)

Пушкин и Псков – это известная литературоведческая тема. А исследователи народной культуры отмечают оригинальный жанр псковского музыкального фольклора – задорные мужские частушки, известные под названием «Скобарь (скобаря) под драку». Они исполняются под гармонь или балалайку и часто сопровождают народную забаву – кулачные бои, что нашло отражение и в стихах псковской поэтессы Елены Родченковой:

Заиграл гармонист «Скобаря под драку»,
Закричали петухи, залаяли собаки…
Распотешить кулаки надобно простору.
Собирайтесь, мужики! Меньше разговору!

На занятиях по лингвистическому анализу текста внимание студентов может быть обращено на такие лингвокраеведческие лексические маркеры поэтического текста, как *вече, князь, Великая, Пскова* (река), *Псков, Пушкин, скобарь, «Скобарь под драку».* Результаты лингвокультурологического анализа этих лексем становятся основой учебных комментариев, навыки разработки которых, как важный параметр лингвокраеведческой

компетенции студентов, формируются в рамках дисциплины «Методика лингвокраеведческой работы».

Методика лингвокраеведческой работы
Methods of teaching regional cultural linguistics

В отличие от теоретических основ лингвокраеведения и навыков лингвокультурологического анализа, интерпретационные лингвокраеведческие навыки формируются с учетом профиля будущих учителей, а значит – с учетом особенностей будущего контингента обучаемых. С этой целью в учебные планы соответствующих педагогических профилей включаются дисциплины «Методика лингвокраеведческой работы в начальной школе», «Методика лингвокраеведческой работы в среднем звене общего образования», «Методика лингвокраеведческой работы с иноязычным контингентом обучающихся».

Тематический план дисциплин строится единообразно и предусматривает формирование у будущих учителей начальных классов, русистов, работающих в средней школе, и преподавателей русского языка как иностранного (РКИ) следующих выделенных нами параметров лингвокраеведческой компетенции:

– владение теоретико-методологическими основами учебной репрезентации (определенному контингенту обучающихся) лингвокраеведческого материала, навыками его комментирования и лексикографической интерпретации;
– владение методикой организации аудиторной и внеаудиторной лингвокраеведческой работы на определенном уровне обучения и конкретными приемами ведения лингвокраеведческой работы на уроке и в рамках внеаудиторных мероприятий, а также навыками организации научно-исследовательской деятельности обучающихся данного уровня.

Остановимся на результатах освоения данного курса, наиболее значимых для учебной педагогической практики будущих учителей.

В первую очередь осваиваются критерии отбора лингвокраеведческого материала для репрезентации определенному учебному контингенту (культурологическая ценность языковых единиц, их региональная маркированность, актуальность, частотность) и принципы формирования лингвокраеведческого минимума (учет возрастных и национальных особенностей учащихся, их культурных и коммуникативных потребностей, общекультурного уровня и уровня владения языком).

На этих же принципах строятся и лингвокраеведческие комментарии к лексическим и фразеологическим единицам, фрагментам текста. Приведем примеры комментариев, разработанных магистрантами профиля «Теория и методика обучения русскому языку как неродному», для иноязычных студентов-филологов 1-го года обучения (уровень владения русским языком В-2), знакомящихся с поэтическими произведениями псковских авторов, упоминавшимися выше:

А. С. Пушкин и Псков. Имя великого поэта тесно связано с Псковским краем. Впервые он попал в родовое имение своей матери – село Михайловское сразу по окончании лицея в 1817 году. Два года – с 1824 по 1826 – поэт провёл в Михайловском в ссылке, куда был отправлен за связь с декабристами, готовившими государственный переворот. Живя здесь, Пушкин познакомился с некоторыми знатными семьями из соседних селений, бывал в губернском Пскове и близлежащих уездных городах. Богатейшие жизненные наблюдения, сделанные на псковской земле, нашли отражение в творчестве поэта, прежде всего в романе «Евгений Онегин». В Пскове А. С. Пушкин, по подсчетам краеведов, бывал 17 раз: в домах генерала И. А. Набокова, губернатора Б. А. фон Адеркаса и других. Одна из улиц в центре Пскова называется Пушкинской. Имя поэта носит Псковский драматический театр и школа № 9 – одна из старейших в Пскове.

Скобарь (множ. *скобари*). Так в разговорной речи называют псковичей. Интересна этимология этого слова. По народному преданию, однажды Петр I хотел разогнуть скобу, сделанную псковскими кузнецами, но не смог этого сделать. Петр очень удивился, ведь он был очень сильным и без особого труда справлялся даже с подковами. Петр похвалил псковских умельцев, назвав их скобарями. Поэтому и сейчас многие псковичи гордо называют себя именно так. Более того, в 2014 году в Пскове установили памятник кузнецу-скобарю. А научная версия происхождения слова *скобарь* предложена псковским филологом Вадимом Константиновичем Андреевым, в ее основе – звуковые изменения, которым подвергался корень слова в ходе исторического развития языка: *псковский – скопский (скопской) – скобской*, а затем, по звуковой ассоциации со словом *скоба* и возникает наименование *скобарь*, которое поддерживается и фактической привязкой к реалиям региона – псковские кузнецы, действительно издавна славились своим мастерством (Андреев, 1995).

Для этого же контингента разработаны лингвокраеведческие комментарии к сборнику «Сказки Псковской области» (2004), которые пригодятся иностранным филологам, изучающим русский фольклор на занятиях по устному народному творчеству.

Навыки лингвокраеведческой репрезентации материала в лексикографическом формате отрабатывались на материале городской

ономастики. Приведем примеры разработки псковских годонимов для учащихся средних классов (А) и для старшеклассников (Б), проявляющих особый интерес к молодежному сленгу (учитывая этот интерес при содержательном наполнении словарной статьи, составители–будущие учителя – мотивируют читателей к познавательному лингвокраеведческому чтению и словообразовательному анализу):

(А) *Улица Вокзальная.* Одна из самых длинных улиц в Пскове. На ней находится железнодорожный вокзал (здание построено в 1863 году по проекту французского архитектора Пиреля и до настоящего времени сохранено практически в первозданном виде). Станция Псков-пассажирский знаменита тем, что 2-го (по старому стилю – 15-го) марта 1917 года в салон-вагоне стоящего здесь царского поезда император Николай II подписал документ о своём отречении от престола.

(Б) *Улица Застенная.* Улица в старинной части Пскова – на Запсковье, располагается между крепостной стеной XV века и древним крепостным рвом, т.е. с наружной стороны стены, или «*за стеной*», с точки зрения горожан. Раньше она называлась Застенной тропой, и в современном названии сохранилось слово *Застенная*. Сама стена очень обветшала, из двенадцати башен Запсковья сохранилось или реставрировано семь, частично реставрированы и небольшие участки стены. В речи молодежи можно услышать шутливое название улицы – *Застенки.* Комический эффект сленгового наименования создается за счет созвучия со словом, которое обозначает тюрьму, место пыток.

Словарные статьи для младших школьников, представляющие городские названия, строятся в форме занимательных рассказов – прогулок по соответствующим улицам и площадям. В словарных статьях, адресованных иностранцам, изъясняются не только краеведческие, но и общерусские социокультурные реалии, комментируются контексты употребления неофициального топонима(в рамках специального проекта по адаптации иностранцев в молодежном социуме разрабатывался и сленговый минимум для иностранцев):

КАЛИНКА, - и, ж., шутл. *Улица Калинина в Пскове.* Калинка, Калинка, Калинка моя! Была бы еще рядом Малиновского – было бы вообще круто (Запись 2016 г.). < Намек на русскую народную песню со словами: «Калинка, калинка, калинка моя, в саду ягода малинка, малинка моя». Ср., напр.: сленговое название улицы Малиновского в Волгограде и Ростове-на-Дону – *Малинка.* < Официальное название улицы связано с именем Михаила Ивановича Калинина (1875-1946), известного государственного и партийного деятеля, участника Февральской революции 1917 года и

Октябрьского переворота, после которого он возглавил Петроградскую городскую Думу. С 1919 занимал видные посты в правительстве страны.

Созданию таких материалов предшествовала работа по анализу уже изданных Экспериментальной лабораторией Псков ГУ лингвокультурологических и лингвокраеведческих словарей (Варламова, Галактионова, & Головина, 2012; Никитина & Рогалёва, 2016 и др.), особое внимание уделялось освоению алгоритмов построения словарных статей, созданию пробных материалов и их коллективному редактированию.

По такому же плану формировались и навыки репрезентации лингвокраеведческого материала в учебных пособиях, предназначенных для аудиторной работы в начальных классах, в среднем звене школы, на факультете предвузовской подготовки иностранцев, на первом курсе их обучения в вузе. Будущие учителя-словесники были ознакомлены с концепциями лингвокраеведческих пособий, разрабатываемых на кафедре теории и методики гуманитарного образования Псков ГУ, проанализировали их макро- и микроструктуру, освоили метаязык, приемы конструирования текстов и упражнений (Рогалёва, 2017). Включившись в состав творческих коллективов, они вместе с преподавателями в рамках дисциплины «Конструирование учебного текста» продолжили работу над учебными материалами как соавторы, совершенствуя навыки учебной репрезентации данного материала определенному контингенту обучающихся. А в рамках педагогической практики на аудиторных занятиях эти авторские пособия использовались студентами в школах г. Пскова и на подготовительном факультете Псков ГУ.

Пособие «Пишите письма. Практикум по развитию речи», разработанное Е. И Рогалевой и М. С. Михайловой (Рогалёва & Михайлова, 2017), решает задачу обучения младших школьников сочинению в жанре письма на краеведческом материале. При работе с пособием ребенок включается в жизненную ситуацию, в которой составление письма становится для него необходимым. С этой целью создается вымышленный мир адресатов и адресантов. Главным персонажем на протяжении всех представленных в пособии занятий является пожилая женщина Надежда Ивановна Кузнецова, работавшая раньше учительницей. По сюжету, она живёт совершенно одна в деревне Синицы и вдруг начинает получать письма от школьников Псковской области. Читая эти письма и отвечая на них, женщина перестает чувствовать себя одинокой. Благодаря письмам, она вновь обретает семью: находит своего племянника, к которому потом и переезжает. На занятиях по материалам пособия школьники узнают о реалиях региона (о них рассказывается в письмах), знакомятся с этикетом письма и сами включаются в процесс письменного общения с одинокой женщиной, таким образом, реализуется и воспитательный момент на фоне

формирования культуры письменной речи и расширения краеведческих знаний.

Практическая часть пособия «Лингвокультурологические аспекты развития речи инофонов», составленное Т. Г. Никитиной, Е. И. Рогалёвой, Н. Ю. Козловой, Н. В. Мурашовой, О. В. Смирновой (Никитина & Рогалёва и др., 2016), представляет собой подборку материалов для лингвокраеведческого чтения. Увлекательные тексты рассказывают студентам-иностранцам о происхождении этнокультурно маркированных русских пословиц и поговорок, отражают их употребление в современной речи на фоне социокультурных реалий псковского региона. Так, с пословицей *Куй железо, пока горячо* иностранцы знакомятся на Псковском кузнечном дворе, с пословицей *Дома и стены помогают* – у стен псковского кремля, о происхождении фразеологизма *вить веревки* узнают в Пушкиногорском заповеднике, а выражение *ума палата* осваивают в ходе виртуальной экскурсии в Поганкины Палаты (памятник средневековой псковской архитектуры).

Даже пособие «Русские падежи. Грамматический практикум», подготовленное Е. И. Рогалёвой, С. Н. Вязовской, Т. Г. Никитиной, Н. В. Кузьминой) (Рогалёва & Вязовская и др., 2016), адресованное иноязычным младшим школьникам – детям переселенцев, только начинающим изучать русский язык, можно назвать регионально ориентированным. Темы пособия оформлены как рабочие листы, заполняя которые, учащийся совершенствует навыки образования падежных форм и использования их в соответствующих синтаксических конструкциях. Фотоиллюстрации изображают городские объекты, названия которых наряду с апеллятивной лексикой используются в упражнениях.

Среди форм внеаудиторной работы с регионально маркированным материалом, методику организации которых осваивают будущие учителя-словесники в рамках дисциплины «Методика лингвокраеведческой работы», – это олимпиады и викторины, экскурсии и экспедиции, праздники, отмечаемые в городе и в его учебных заведениях. Из разработок, выполненных на областном уровне, отметим участие бакалавров в создании материалов для интеллектуального конкурса старшеклассников «Барс» и областной краеведческой олимпиады младших школьников «Барсик» (барс – символ Пскова, изображенный на гербе города), организацию магистрантами серии экскурсий «Мои первые дни в Пскове», Пушкинского праздника и Псковской масленицы для иностранных студентов в Русском клубе. Рекомендации по реализации таких научно-методических проектов на уровне диссертационных исследований магистранты-русисты получают в специальном методическом пособии (Никитина, 2017).

Введенные в учебные планы элективные курсы по лексикографии, обобщающие опыт Экспериментальной лаборатории учебной лексикографии, – «Школьный лингвокраеведческий словарь: принципы разработки, приемы использования», «Страноведческая и краеведческая фразеография», «Лингвокраеведческий словарь для иноязычного адресата» и совместные словарные проекты преподавателей и студентов формируют не только лексикографические навыки будущих педагогов, но и их способности организовывать научно-исследовательскую работу в сфере лексикографии со своими учениками в период педагогической практики: сбор и анализ языкового материала, его первичная обработка по каждому из лексикографических параметров, составление словарных статей в соответствии с лексикографической концепцией. Так, материалы организованной для старшеклассников экспедиции по новым городским районам Пскова («Новые улицы – новые названия») в настоящее время обрабатываются студентами и членами школьного лексикографического кружка для включения в новое издание топонимического словаря (Варламова, Галактионова, & Головина, 2012). Старшеклассники были привлечены практикантами и к сбору материала для лингвосоциокультурологического словаря «Актуальный молодежный лексикон: Псков 2015-2016» (Никитина & Рогалёва, 2016). На материале регионального художественного текста магистрантами организована исследовательская работа в группе иностранных бакалавров-русистов: составление словаря русских сравнений (Борисенко, 2017). На факультативе «Сопоставительные методики в обучении русскому языку как иностранному» был представлен этнолингвистический проект магистрантки, организовавшей работу со студентами-туркменами, изучавшими реалии псковских сказок (Муратова, 2017): студенты подготовили материалы для сопоставительного этнографического словаря народных названий одежды, построек, кушаний.

Методический эксперимент по оптимизации лингвокраеведческой подготовки бакалавров и магистров – будущих учителей-словесников привел к явному повышению их интереса к лингвокраеведческой проблематике. Так, если четыре года назад лишь 5 % курсовых и выпускных квалификационных работ бакалавров и магистров выполнялись на региональном материале, то в 2017 г. более 60 % обучающихся выразили желание выполнить исследования такого уровня на лингвокраеведческом материале.

Для проверки эффективности предложенной модели реализации лингвокраеведческого компонента подготовки учителей-словесников был проведен мониторинг сформированности основных параметров лингвокраеведческой компетенции участников методического

эксперимента. Студенты контрольных групп, обучавшихся по обычному учебному плану, и экспериментальных групп (в их план обучения на каждом из профилей подготовки были внесены описанные выше изменения в соответствии в нашей методической концепцией) в начале эксперимента (констатирующий срез) и по его завершении (контрольный срез) выполнили комплекс заданий, направленных на выявление уровня владения навыками отбора, анализа, лингвокраеведческого комментирования языкового материала, организации внеаудиторных лингвокраеведческихмероприятий и научно-исследовательской работы обучающихся. Комплекс включал следующие задания:

- Приведите наименования псковских улиц, связанные с историей Псковского края; раскройте культурно-исторический компонент их мотивировки.
- Приведите этимологию топонимов *Псков, река Великая, Снятная гора, река Мирожка, Великие Луки.*
- Отберите из предложенного текста (предлагаются тексты псковских писателей) лексику для лингвокраеведческого комментирования.
- Составьте маршрут ознакомительной экскурсии по городу для студента-иностранца, только что приехавшего в Псков.
- Предложите темы лингвокраеведческих исследований для учащихся начальной школы, среднего звена, старшеклассников.
- Перечислите источники – словари, сборники, региональные журналы, которыми вы будете пользоваться при разработке лингвокраеведческих материалов.

При оценочном максимуме в 30 баллов в начале эксперимента студенты в контрольных и экспериментальных группах набрали от 2 до 5 баллов (по отдельным респондентам), что соответствовало 7-16 % от максимального уровня. Контрольный срез по завершении экспериментального обучения показал повышение уровня сформированности контролируемых навыков в контрольных группах до 7-23 % (2-7 баллов), в экспериментальных группах до 70-83 % (20-25 баллов).

Динамика уровня сформированности контролируемых параметров лингвокраеведческой компетенции студентов представлена на диаграмме (Рис. 1) средними показателями для совокупности контрольных групп (профили бакалавриата «Начальное образование», «Филологическое образование», «Русский язык как иностранный» и магистратуры – «Теория и методика обучения русскому языку как неродному») и экспериментальных групп тех же профилей.

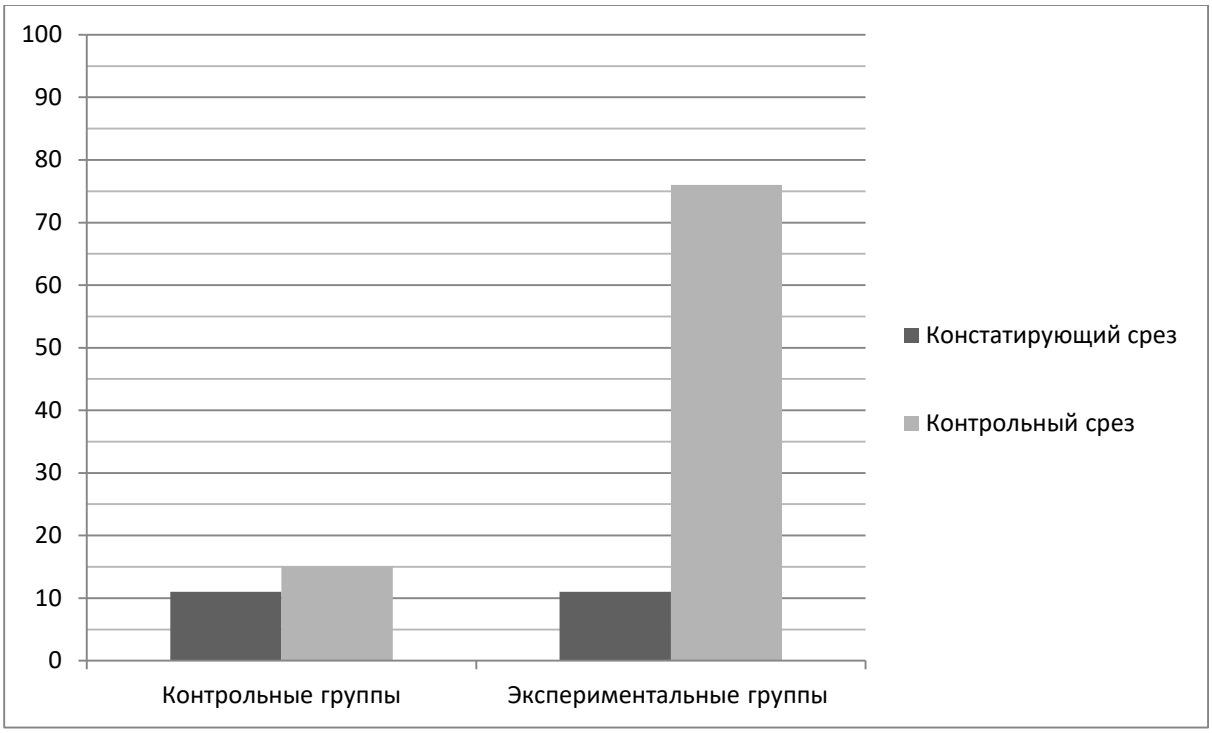

Рис. 1. **Динамика уровня сформированности контролируемых параметров лингвокраеведческой компетенции будущих учителей-словесников (в %)**
Fig. 1 ***Dynamics of the completeness level of the monitored parameters of future language teachers' regional cultural linguistic competence (indicators in %)***

Выводы
Conclusions

1. Эффективность работы учителя-словесника в социокультурных условиях конкретного региона во многом определяется сформированностью у него лингвокраеведческой компетенции, в качестве параметров которой выделяются: владение принципами лингвокультурологического анализа регионального языкового материала инаучно-методическими основами его учебной репрезентации определенному контингенту обучающихся, а также соответствующие профессиональные навыки: распознавания и отбора лингвокраеведчески ценных языковых единиц, выявления их регионально-культурных коннотаций, лингвокультурологического комментирования регионального материала, его лексикографической интерпретации, а также владение методами и приемами ведения лингвокраеведческой работы на уроке и в рамках внеаудиторных мероприятий, навыками организации научно-исследовательской деятельности обучающихся.

2. Формирование лингвокраеведческой компетенции обеспечивается комплексным подходом к формированию, структурированию и реализации лингвокраеведческого компонента подготовки учителя-словесника, что предполагает: обращение к регионально маркированному материалу различных языковых уровней, введение в учебные планы лингвокраеведчески ориентированных учебных дисциплин и модулей профессиональной подготовки студентов, использование авторских учебных пособий – современных средств обучения, обеспечивающих формирование определенных параметров лингвокраеведческой компетенции и разработанных на региональном материале, лингвокраеведческую ориентацию педагогической практики и научно-исследовательской работы студентов, привлечение их к лингвокраеведческим проектам кафедры и словарной лаборатории.
3. Результаты экспериментального обучения бакалавров профилей «Начальное образование», «Филологическое образование», «Русский язык как иностранный» и магистрантов профиля «Теория и методика обучения русскому языку как неродному» в Псковском университете показали, что предложенная модель реализации лингвокраеведческого компонента подготовки учителей-словесников обеспечила значительное повышение уровня сформированности их лингвокраеведческой компетенции, что доказывает эффективность разработанной методической концепции.

Summary

1. The efficiency of the language teachers' working in a particular region of the country is largely determined by theirregional cultural linguistic competence, including regional linguistic and cultural knowledge and professional skills: the selection of regional language material and identifying of its cultural connotations, the linguistic and cultural commenting and lexicographic interpretation of this material, the experience in using of methods and techniques of regional language and culture teaching, skills of organization of research activity of students in regional cultural linguistics.
2. The formation of these skills and acquisition of professional experience is supported by the implementation of the regional linguocultural component of teachers' professional training. To improve the linguistic and cultural training of language teachers, according to our concept, a new regional linguocultural courses in the curriculum are introduced, different types of students' activities and research projects connected with studying regional cultural linguistics are implemented, a new models of modern means of teaching – the author's textbooks and educational dictionaries are used.
3. The results of the experimental teaching of bachelors and master students in Pskov state university (the profiles "Primary education", "Philological education", "Russian as a foreign language") prove the effectiveness of the suggested methodology of the regional

linguocultural component implementation in language teachers' training. Thus, the practical value of the concept presented in this article is confirmed.

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THE KNOWLEDGE ON LYME BORRELIOSIS AND OTHER TICK-BORNE DISEASES AMONG NURSING STUDENTS FROM POLAND AND SLOVAKIA

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Abstract. *Tick-borne diseases are infectious diseases transmitted by the bites of infected ticks. The most common vector-borne disease in Europe is Lyme borreliosis (LB). The number of the reported cases of LB has been steadily increasing. For this reason, it is important to undertake educational activities in the field of tick-borne diseases. The aim of the study was to investigate the level and scope of knowledge on tick-borne diseases among nursing students from Poland and Slovakia. The study sample consisted of 428 nursing students (192 students of the State School of Higher Education in Biała Podlaska, Poland and 236 students of the University in Presov, Slovakia). The knowledge of the surveyed students on tick-borne diseases is limited. Polish students demonstrated greater knowledge about LB, while students from Slovakia showed greater awareness of the threat posed by tick-borne encephalitis. Particularly worrying is the lack of knowledge on proper way of removal of a tick attached to the skin. Students recognize the need to broaden their knowledge on tick-borne diseases, which should be taken into consideration in realized studies curricula.*
Keywords: *Lyme borreliosis; Poland; Slovakia; Students; Tick-borne diseases.*

Introduction

In European countries, the main vector of pathogens responsible for causing Lyme borreliosis (LB), tick-borne encephalitis (TBE), granulocytic anaplasmosis and babesiosis are the ticks *Ixodes ricinus* (Rizzoli et al., 2014; Tokarska-Rodak,

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2016; Bartosik et al., 2011). Deciduous and mixed forests are the natural habitats of ticks, but many populations of these mites are also found in the immediate human environment in parks and urban green areas, gardens, squares and green suburban areas. Such a widespread of ticks results in an increase in the risk of acquiring human tick-borne diseases. Exposure to tick bites is dependent on a several regionally changeable socio-economic factors such as a professional activity of a man, social awareness and tourism, and availability in a case of TBE vaccination (Rizzoli et al., 2014).

In Europe, the highest incidence of Lyme disease occur in Germany, Austria, Slovenia, Sweden and Poland (Pancewicz et al., 2015). The number of cases of Lyme borreliosis in Poland has been steadily increasing. In 2015, 13,625 cases were recorded (incidence of 35.4/100,000), while in 2014, 13,863 cases (incidence of 36.0/100,000) (National Institute of Public Health - National Institute of Hygiene, 2016). Slovakia recorded lower rates of incidence of Lyme borreliosis in comparison to Poland. The number of registered cases of Lyme borreliosis in Slovakia in 2015 amounted to 913 (incidence 16.84/100,000) and in 2014 - 680 (incidence 12.55/100,000) (Epidemiological Information System in Slovakia).

The second most commonly diagnosed disease transmitted by ticks *I. ricinus* in Europe, is tick-borne encephalitis. In the years 1990-2007 in Europe 157,584 cases were found, which accounted for an average of 8,755 cases per year (Pancewicz et al., 2015). In Poland in 2015 the number of registered cases of TBE was 150 (incidence 0.39/100,000) and was lower compared to 2014, when recorded 195 cases (incidence rate: 0.51/100,000) (National Institute of Public Health - National Institute of Hygiene, 2016). In Slovakia in 2015 there were registered 84 cases of TBE incidence and incidence rate was 1.55/100,000), while a year earlier registered 116 cases (incidence 2.14/100,000) (Epidemiological Information System in Slovakia).

The quoted epidemiological data indicate that both in the area of Poland and Slovakia pathogens transmitted by ticks are an important issue of public health. For this reason, it is important to undertake educational activities in the field of prevention of tick-borne diseases. The aim of the study was to investigate the level and scope of knowledge on tick-borne diseases among nursing students from Poland and Slovakia.

Material and method

The study sample consisted of 428 nursing students from Poland (192 students of the Pope John Paul II State School of Higher Education in Biała Podlaska: 1st year 35 persons, 2nd year 59 persons, 3rd year 98 persons) and Slovakia (236 students of the University in Presov: 1st year 84 persons, 2nd year

76 persons, 3rd year 76 persons). The average age of Polish students was 23.3 years (SD = 4.36), while Slovakian 22.2 (SD = 2.26).

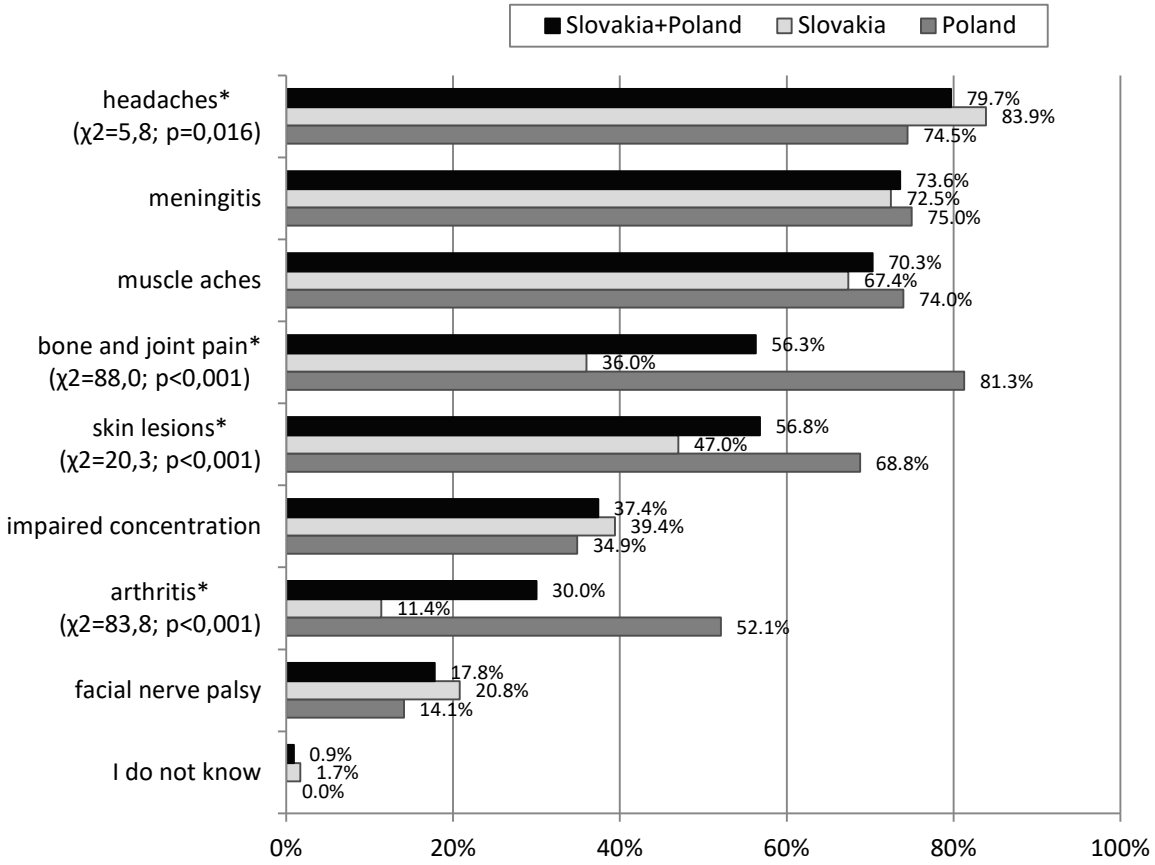
The applied research tool was the authors' questionnaire. It consisted of 16 questions checking knowledge on Lyme borreliosis and other tick-borne diseases (13 closed, 2 half-open and 1 open) and questions relating to personal data (age, gender, field and year of study). Closed questions related to knowledge of the etiologic agent of Lyme borreliosis, possible routes of infection, the existence of the early cutaneous manifestations indicating the infection and its diameter and therapeutic treatment in patients diagnosed with erythema migrans, possible symptoms of Lyme disease, the existence of a vaccine against LB and TBE, prevention activities in the field of tick-borne diseases, self-assessment of the knowledge level on Lyme borreliosis and opinion on the need to broaden own knowledge on tick-borne diseases. Half-open questions related to the correct way of removing a tick attached to the skin and the sites where to use tick repellents. Open question related to pathogens transmitted by ticks, which can cause symptoms in humans (except for *B. burgdorferi*). In order to test the hypotheses about the independence of the characteristics the Pearson's chi-squared test (χ^2) was used. In statistical inference, the level of significance was 0.05. Statistical analyses were performed on the basis of the STATISTICA software v. 7.1 (StatSoft, Poland).

Results

Among the total number of students 52.6 % properly qualified pathogen causing Lyme borreliosis (*Borrelia burgdorferi*) as a bacterium. No significant differences were found between students from Poland and Slovakia as far as providing the correct answers. The most commonly given incorrect answer among students from both countries was the answer that *Borrelia burgdorferi* is a virus (32.9 %).

The correct way of infection of human spirochete *Borrelia burgdorferi*, through bites by infected vector organisms, indicated 73.6 % of all respondents. Students from Poland chose this answer significantly more often compared with students from Slovakia, respectively, 96.9 % and 54.7 % (χ^2=97.1; p<0.001).

Among the possible symptoms of Lyme borreliosis surveyed students most often mentioned headaches (79.7 %), meningitis (73.6 %) and muscle pains (70.3 %). Polish students significantly more often mentioned bone and joint pains, arthritis and skin lesions, while students from Slovakia headaches. Detailed results are shown in Fig. 1.



* - statistically significant differences p≤0.05

Figure 1. **Possible symptoms of Lyme borreliosis as indicated by the surveyed students**

The proper knowledge of the existence of an early symptom of skin (erythema), indicating the infection with *Borrelia burgdorferi*, which does not always occur in people infected with spirochete, showed a 48.8 % of all students. Significantly more correct answers gave Polish students compared with students from Slovakia, respectively, 56.3 % and 42.8 % (χ^2=7.7; p=0.006). About the presence of such a symptom at every infection with *Borrelia burgdorferi* were convinced 34.4 % of respondents. The percentage of students from two analyzed countries was in this respect similar and amounted to 37.0 % among students from Poland and 32.2 % in the group of students from Slovakia. The rest of students thought that there is no evidence of a skin infection or they responded that they had no knowledge on the subject.

The knowledge of erythema migrans, as a skin change having a diameter greater than 5 cm, showed 57.7 % of all respondents. Significantly more correct answers gave students from Poland (70.8 %) compared with students from Slovakia (47.0 %) (χ^2=24.6; p<0.001).

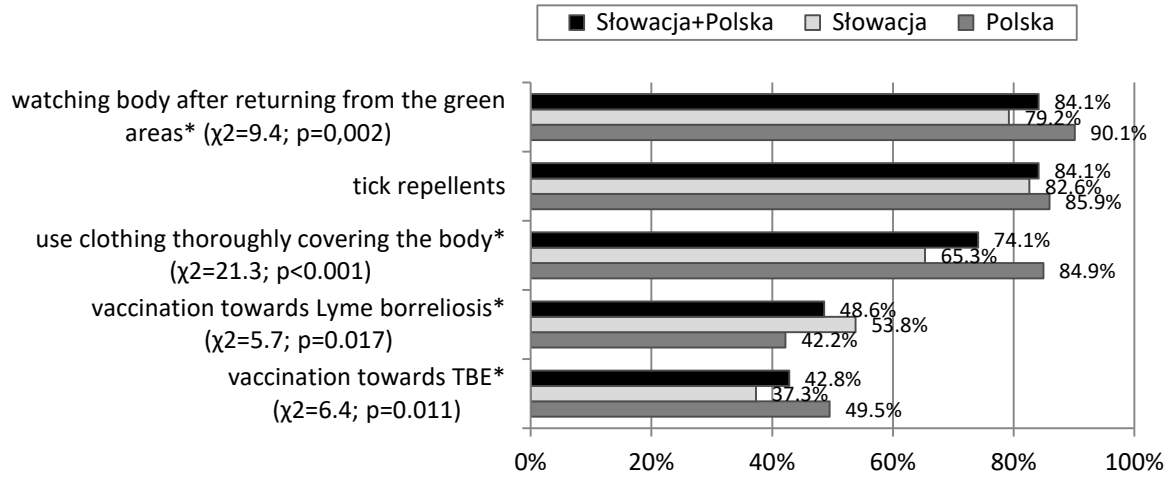
The proper knowledge of the proceedings in case of erythema migrans, which comprises administering antibiotics without the need for serological tests showed 18.2 % of the surveyed students. Percentage of students, who gave the correct answer, with both analyzed countries were almost identical (Poland 17.7 %, Slovakia 18.6 %). Most of the surveyed students (75.7 %) were convinced that, despite the presence of erythema migrans antibiotics should be taken only after obtaining positive results of serological tests (Poland 79.7 %, Slovakia 72.5 %).

The students when asked about the vaccine against Lyme borreliosis in the majority responded that such a vaccine existed or that they had no knowledge on the subject. About the lack of a vaccine against LB was convinced 29.7 % of students. Significantly more often such answer gave students from Poland (43.2 %), compared with students from Slovakia (18.7 %) (χ^2=30.7; p<0.001).

The knowledge of other pathogens transmitted by ticks, which can cause symptoms, showed a 44.4 % of the surveyed students. Significantly more often they were students from Slovakia 75.4 % (χ^2=205.2; p<0.001), who pointed to the pathogen responsible for tick-borne encephalitis. Among Polish students only 6.3 % indicated other pathogens that are transmitted by ticks. Most often mentioned was the tick-borne encephalitis virus, and individuals were able to point to other pathogens.

About the existence of a vaccine against TBE knew 53.7 % of all respondents. No significant differences were found in the knowledge of the subject among students from both analyzed countries (Poland 53.7 %, Slovakia 53.8 %).

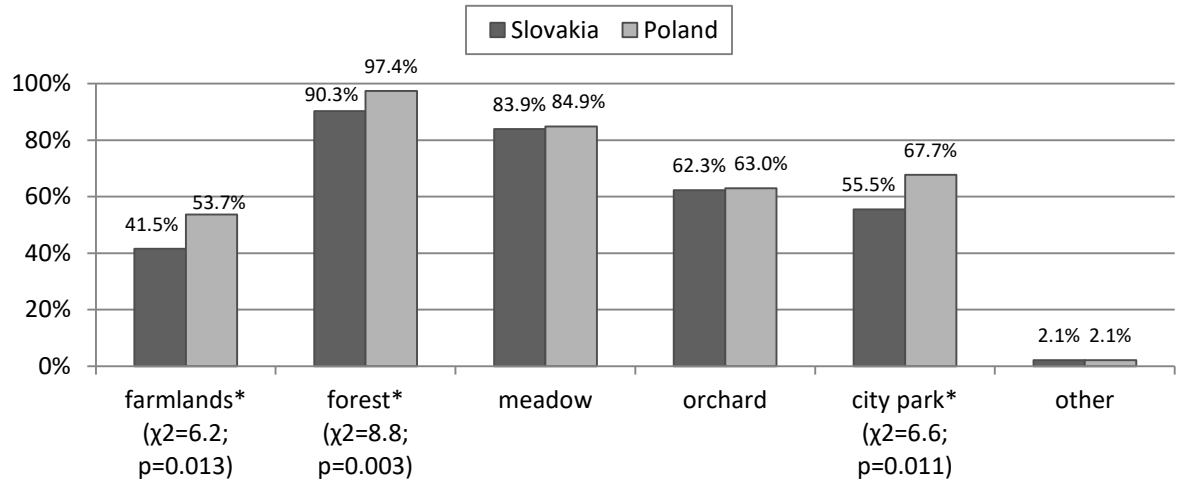
Among the various methods of prevention of tick-borne diseases surveyed students most often indicated watching the body after returning from the green areas (84.1 %) and use of tick repellents (84.1 %). Watching the body was significantly more often chosen by students from Poland, as well as the use of clothing covering the body and vaccination against tick-borne encephalitis. Almost half of all respondents (48.6 %) incorrectly pointed to vaccinations in the direction of Lyme borreliosis. Detailed summary of the results is given in Fig. 2.



* - statistically significant differences p≤0.05

Figure 2. **Prevention methods of tick-borne diseases in the opinion of the surveyed students**

Among the sites where to use tick repellents surveyed students most frequently mentioned forests and meadows. Polish students significantly more often indicated forests, farmlands and city parks. Detailed results are shown in Fig. 3.

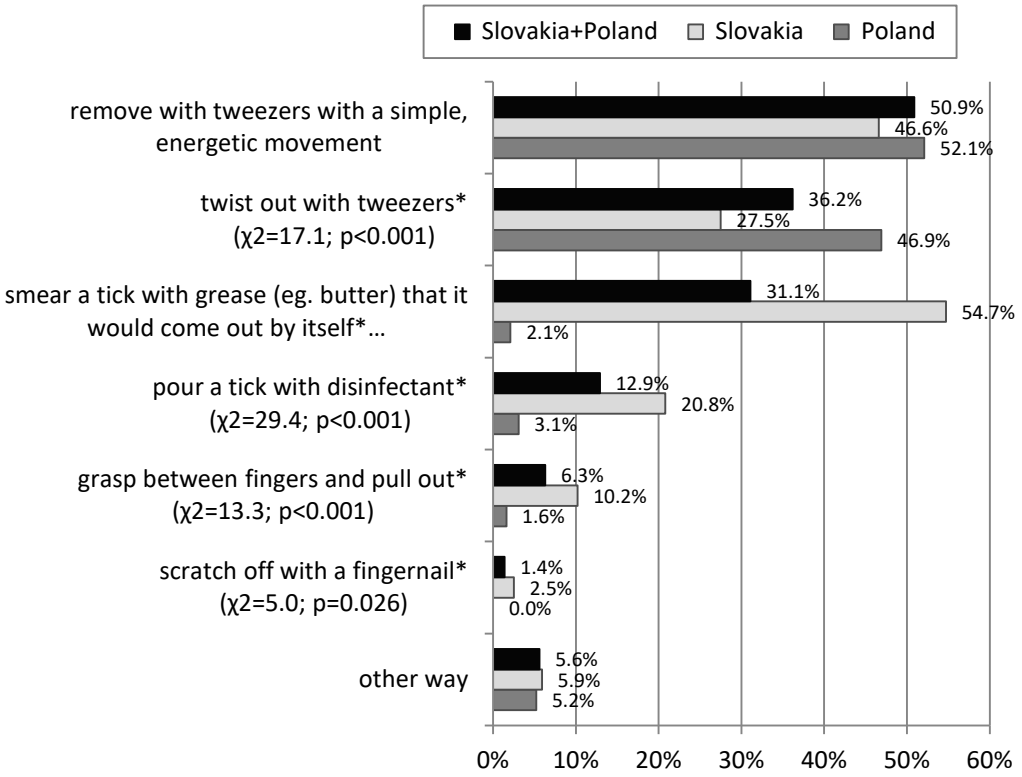


* - statistically significant differences p≤0.05

Figure 3. **The sites where to use tick repellents in the opinion of the surveyed**

Among the various ways of removing tick attached to the skin, as a correct method, surveyed students most often pointed to the removal with tweezers with a simple, energetic movement (50.9 %), twisting out with tweezers (36.2 %) and smearing a tick with grease (31.1 %). Students from Poland significantly more often chose the method based on twisting out with tweezers. Students from

Slovakia significantly more often chose smearing a tick with grease, pouring with disinfectant, pulling out by finger and scratching off by a fingernail. A detailed list of results is shown in Fig. 4.



* - statistically significant differences p≤0.05

Figure 4. **Proper ways of removing tick attached to the skin in the opinion of the surveyed students**

The majority of surveyed students assessed their knowledge on Lyme borreliosis as a minimal or average. Students from Poland assessed higher the level of their knowledge (χ^2=61.5; p<0.001). The obtained results are shown in Fig. 5.

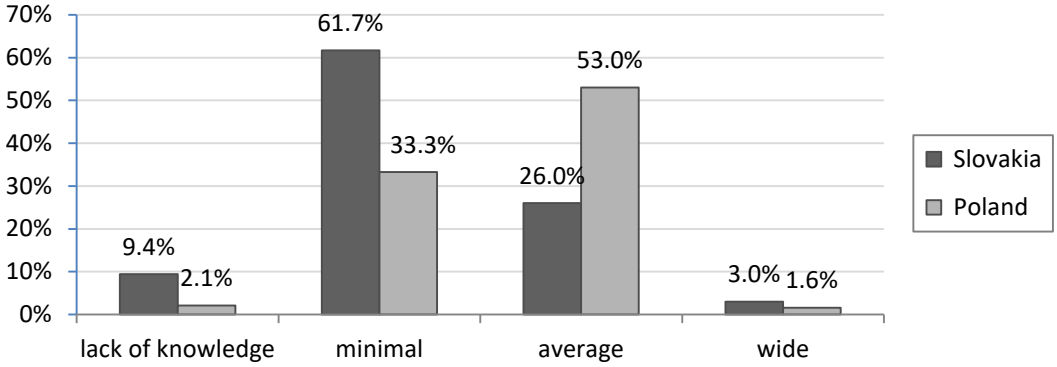


Figure 5. **Self-assessment of the knowledge level on Lyme borreliosis among the surveyed students**

The majority of all researched students (83.4 %) see the need to broaden their knowledge on tick-borne diseases. In this aspect no significantly differences were observed between students from both analyzed countries. The need was reported by 79.7 % students from Slovakia and 88.0 % from Poland.

Discussion

Lyme borreliosis is the most common tick-borne infectious disease in North America and in countries with moderate climates in Eurasia, including Poland and Slovakia. Lyme borreliosis is caused by spirochaetes of the *Borrelia burgdorferi* sensu lato species complex, which are transmitted by ticks (Stanek et al., 2012). Only 52.6 % of students were able to correctly classify the pathogen causing the bacterium; 32.9 % were convinced that it was a virus. In studies of Kurnatowski et al. (2011), 35.0 % of students of forestry were able to correctly identify the bacteria as the etiologic agent of Lyme borreliosis. The same percentage of respondents felt that these were the ticks, and 30.0 % indicated viruses.

In own research, 73.6 % of students, as the correct route of human infection by spirochete *Borrelia burgdorferi*, indicated bites by infected vector organisms. Students from Poland were significantly more likely to know about that (96.2 %). In a study of forestry students all surveyed knew that a tick-bite is the main cause of Lyme disease infection, and that blood is the main route of pathogen transmission (Kurnatowski et al., 2011).

Lyme borreliosis is a multisystemic disease that can affect many organs, including the heart, joints, central nervous system, and brain, and can result in a large number of diverse symptoms including extreme fatigue, flu-like symptoms, arthritis, peripheral neuropathy, and cognitive dysfunction (Cook, 2015). Among the possible symptoms the surveyed students most often pointed headaches (79.7 %), meningitis (73.6 %) and muscles pain (70.3 %). Polish students significantly more often mentioned bone and joint pains, muscles pains, arthritis and skin lesions, while students from Slovakia headaches. In a study of forestry students following most common symptoms of borreliosis were: arthritis (85.0 %), myalgia (80.0 %) and fever (65.0 %) (Kurnatowski et al., 2011).

The knowledge of erythema migrans is particularly important. Erythema migrans (EM) is clinical evidence of Lyme borreliosis and develops in about 80 % of patients. It is a characteristic symptom of early localized infection and most typically develops in the month following a tick bite. Serological diagnostics has no significant relevance in typical cases of migratory erythema as the presence of a characteristic skin lesion combined with a history of tick bite is sufficient for diagnosis. Erythema of more than 5 cm in diameter is of diagnostic value. Spontaneous regression of erythema within several days up to several weeks (4 weeks on average) is observed in patients not treated with antibiotics

(Pancewicz, 2014; Pancewicz et al., 2015), so it is important that it has not been underplayed**.** Proper knowledge of the existence of an early symptom of skin (erythema) indicating the infection with *Borrelia burgdorferi*, which does not always occur in people infected with spirochete, showed a 48.8 % of the surveyed students. The fact that the erythema migrans is a skin lesion, having a diameter greater than 5 cm, knew 57.7 % of the student. Students from Poland gave significantly more correct answers for both issues. Most of the surveyed students (75.7 %) were convinced that, despite the presence of erythema migrans, antibiotics should be taken only after obtaining positive results in serological testing.

No vaccine is available to prevent Lyme borreliosis in man (Stanek et al., 2012). Only 29.7 % of the surveyed students knew about that, more students from Poland (43.2 %). Most students were convinced that such a vaccine existed or indicated that they had no knowledge on the subject. In research of students of life sciences faculties (University of Life Sciences in Lublin), who should have a basic knowledge of prevention of tick-borne diseases because of the future occupational exposure to ticks, 30 % of respondents were convinced about the lack of a vaccine against Lyme borreliosis (Kowalczyk et al., 2016).

Ticks (Acari: Ixodidae) transmit a wide variety of pathogens to vertebrates including viruses, bacteria, protozoa and helminthes. Tick-borne pathogens are believed to be responsible for more than 100,000 cases of illness in humans throughout the world (de la Fuente et al., 2008). Among the surveyed students, only 44.4 % were able to name another pathogen (except for *B. burgdorferi*) transmitted by ticks, which can cause symptoms of a disease. Significantly more often students from Slovakia (75.4 %) pointed to the virus responsible for a tick-borne encephalitis. In Europe, tick-borne encephalitis (TBE) is the second most commonly reported disease transmitted by *I. ricinus* ticks (Pancewicz et al., 2015). A large knowledge of tick-borne diseases other than Lyme borreliosis, showed students of life sciences. In a study conducted at the University of Life Sciences in Lublin it was not a student who would not mention at least one tick-borne disease (except for Lyme borreliosis). Among the most frequently mentioned disease entities there were tick-borne encephalitis and Rocky Mountain spotted fever (Kowalczyk et al., 2016). In research of students of the faculties of life sciences from Poland and the Czech Republic LB was the best known tick-transmitted disease, 41 % of the females and 92 % of the males of the Czech participants and 46 % of the females and 21 % of the males of the Poles were aware of TBE. Significantly lower knowledge was observed in awareness of ehrlichiosis and Q fever. Knowledge of any other diseases, such as tularemia, bartonellosis, babesiosis, etc., was detected only rarely (Nejezchlebova et al., 2016).

TBE vaccines are accessible. Encepur and FSME IMMUN, vaccines against TBE, are effective, safe and highly immunogenic. They induce the production of neutralizing antibodies, presenting cross-reactivity to various virus strains in Europe and Asia (including Siberian and Far Eastern subtypes). Vaccine schedule, which is employed correctly, results in a sustained protective immunity in case of 98 % of vaccinated persons (Pancewicz et al., 2015). About the existence of a vaccine against TBE knew half of the surveyed students (53.7 %).

Among the various methods of prevention of tick-borne diseases surveyed students most often mentioned watching the body after returning from the green areas (84.1 %), use of tick repellents (84.1 %) and clothing thoroughly covering the body (74.1 %). These methods significantly more often were chosen by students from Poland. Among the students of forestry the most important preventive measures involved checking the body for ticks and wearing proper shoes and protective clothes; this opinion was shared by 87.5 % of the students. The second prophylactic measure reported by them was using tick or insect repellents (62,5 %) and removing the attached ticks within the first 24 hours (60.0 %) (Kurnatowski et al., 2011).

Among the sites where it is worth to use tick repellents surveyed students most often indicated the forest and meadows. Less frequently there were mentioned orchards, city parks and farmlands. Biological properties of *I. ricinus*, its high ecological plasticity, including the lack of specificity of the host, enable a wide dissemination in the environment. Increasingly, the presence of *I. ricinus* is confirmed in urban and suburban areas, parks, squares, urban recreational areas, gardens, on private properties, fallows (Kiewra, 2014), which increases the risk of being bitten by these arthropods.

An important element in the prevention of Lyme borreliosis is to remove correctly a feeding tick as soon as possible, because the longer the infected tick feeds, the more the risk of infection increases (Steere et al., 2004; Zajkowska, 2008; Rizzoli et al., 2011; Stanek et al., 2012). The use of incorrect ways to remove a tick also increases the risk of transmission of pathogens from the body of the tick to the skin. Most often it is recommended to grab it with tweezers, as close to the skin and pull out with a simple and energetic movement perpendicularly to the skin. The place after removing the tick must be disinfected (Zajkowska, 2008; Rizzoli et al., 2011). Among the various ways of removing a tick attached to the skin students most often indicated the proper way (removing by tweezers with a simple, energetic movement) (50.9 %). Students from Slovakia frequently mentioned the inappropriate method of removing a tick. Particularly worrying is the high percentage of students from Slovakia who believe that the tick should be smeared with grease (eg. butter) that it would come out by itself (54.7 %). Ticks should never be covered with such substances as butter, petroleum jelly, kerosene, petrol or nail varnish, as the suffocating tick introduces pathogens

into the skin along with its vomit (Tylewska-Wierzbanowska & Chmielewski, 2017). In the research on life sciences students in Poland, 58.15 % of respondents when asked to indicate the proper procedure in case of being bitten by a tick, answered that the tick should be removed with tweezers, disinfect and watch the bite site (Kowalczyk et al., 2015).

The results of the study indicate that the knowledge of the surveyed students on Lyme borreliosis and other tick-borne diseases was rather limited. It has been observed that more often correct answers about Lyme borreliosis were given by students from Poland. This may be associated with a higher risk of the disease. In Poland, the recorded incidence of Lyme borreliosis is clearly higher. In 2015, the incidence rate reached more than twice as much higher compared with Slovakia (National Institute of Public Health - National Institute of Hygiene, 2016; Epidemiological Information System in Slovakia). The students from Slovakia showed a greater awareness of the threat of TBE. This tick-borne disease in turn, is more often recognized in Slovakia (National Institute of Public Health - National Institute of Hygiene, 2016; Epidemiological Information System in Slovakia). As part of the conducted self-assessment, most of the surveyed students from Slovakia evaluated their knowledge on Lyme borreliosis as minimal, while Polish students as an average. Students from Poland also assessed higher the knowledge of Polish society about the disease, although dominated the responses that it was minimal. Among the respondents, 83.4 % of students see the need to broaden their knowledge on tick-borne diseases. Therefore, it is worth to extend the subject matter on tick-borne diseases in the currently realized curricula on medical fields of studies to better prepare future medical staff to undertake educational and awareness-raising activities in a society in terms of tick-borne diseases. From the point of view of public health, a more frequently recorded presence of ticks within city boundaries and industrial areas (Wójcik-Fatla et al., 2009; Rizzoli et al., 2014), and systematically increasing number of registered cases of Lyme borreliosis are highly disturbing phenomena.

Conclusions

The knowledge of the surveyed students on tick-borne diseases is limited. Polish students demonstrated greater knowledge about Lyme borreliosis, while students from Slovakia showed greater awareness of the threat posed by tick-borne encephalitis. Particularly worrying is the lack of knowledge on proper way of removal of a tick attached to the skin. Nearly half of the surveyed students from Slovakia believes that the correct way of removing a tick is to smear it with grease that it will come out by itself. Students recognize the need to broaden their knowledge on tick-borne diseases, which should be taken into consideration in realized studies curricula.

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NON-VERBAL COMMUNICATION IN HIGHER EDUCATION

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Abstract. *The article presents the importance of non-verbal communication in the sphere of education at the level of higher education. In terms of the didactic process, education, two types of communication deserve special attention, i.e. public and interpersonal communication. The author presented the characteristics of the above types of communication situation and differences in the non-verbal feedback that are visible between the lecturer's direct conversation with the student and the lecture given by the academic teacher. The article also indicates the types and functions of non-verbal behaviours, devoting particular attention to uses related to the use of proxemics in education. The significance of proxemics was characterised in the sphere of teaching, paying attention to issues concerning the feeling of congestion or maintaining distance relative to the communicative situation and goals between the academic teacher and a student. The factors determining the issues related to the feeling of congestion are also presented.*
Keywords: *education, higher education, interpersonal communication, public communication, non-verbal communication, proxemics.*

Introduction

Communication is the process underlying the education and upbringing of children and young people. The effectiveness of sharing knowledge, building relationships and a good working atmosphere and discussion depends on the effectiveness of this process. Also in terms of arousing interest in specific problems and topics, and the involvement of pupils and students in school and scientific matters, communication plays a significant role. A special role in this area is played by non-verbal communication, which Sztejnberg (2007) pays attention to when he writes "one of the important ways to establish good teacher-student relationships is to use appropriate non-verbal behaviours. They prove the teacher's availability, his closeness, warmth emanating from him and the willingness to communicate with students." Non-verbal communication is an important tool for the academic teacher's work with students, allowing, among others, for easier and more complete transmission of verbal messages. The aim of the article is to present the meaning of non-verbal behaviour in the field of didactic process and education at the higher education level, with particular emphasis on proxemics. The selection of this type of non-verbal behaviour is not accidental,

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and its importance in the sphere of education had been confirmed by numerous studies. The issue emphasised by Jacko (2012) is also significant, saying that "one of the most important achievements of proxemics is to reveal and investigate the relationship between social ties and the interactional distance. The relationship mentioned here is bilateral: on the one hand – interpersonal relationships affect the interactional distance, and on the other – the interaction distance affects these social ties."

Public and interpersonal communication in education and higher education

In terms of education, one can speak about a special significance of two types of communication, i.e., public and interpersonal communication. Both types of communication are direct, they can be used to convey information (information communication), but also to influence (persuasive communication). The lecturers conducting the lecture participate in the area of public communication, in which "the presence of an individual speaker is assumed who is in contact with a certain audience. It happens when a group becomes too numerous to allow everyone to actively participate in the conversation at the same time. It is characterized by less direct, less personal interactions" (Głodowski, 2006), which are characteristic of interpersonal communication. There is a clear and sharp division of roles in public communication, so there is a speaker who is responsible for preparing and transmitting information, and listeners – an audience whose task is to receive the information presented. (Głodowski, 2006) Feedback remains an important issue, the nature of which is completely different in the case of interpersonal and public communication. Interpersonal communication is a face to face communication between two people or a small group of people (three to four interlocutors). In this type of communication, the sender of the message has the opportunity to draw attention and react to any feedback (both verbal and non-verbal) sent from each participant in this communication situation. Recipient are also active, because each of them can respond to the issues raised by the sender, which in the case of public communication would be extremely difficult an could disturb the course of the meeting and the lecture. It is worth emphasizing that "interpersonal communication is a transaction process, in which characters and symbols are exchanged, acquiring significance in the context of the interaction of several people. Like any type of communication, it is best to consider it as a process in which all aspects of experiencing a communication situation can affect one another and in which communication changes over time and depending on the context. (Morreale et. al., 2007)

However, it should be noted that in the case of interpersonal communication, both verbal and non-verbal feedback takes on a similar meaning, it is equally visible to the speaker. In the case of public communication the situation is

different. (Głodowski, 2006) draws attention not only to the clearly defined division of roles, but also to some kind of imbalance that refers to the time of speaking. One speaker (lecturer) speaks to students (listeners), who form the auditorium. Therefore, verbal feedback is limited. In the case of this type of communication situation, the speaker is based primarily on non-verbal feedback, adapting to the auditorium and paying particular attention to "its collective response rather than the reactions of individual listeners." (Głodowski, 2006) Of course, during the lecture, questions and comments may arise, which are reported by the listeners, but they do not have such a frequent character as in the case of interpersonal communication, which is based on immediate and direct feedback. (Ostrowska, 2007) draws attention to this fact, claiming that "the interactive and transactional character of the communication process, as well as the unity of space and time generates immediate feedback, expressed both in the form of verbal signs an non-verbal signals."

Considering the importance of non-verbal feedback, as well as the use and functions of interpersonal communication, which "relates to the relationships and creates interpersonal relationships" (Morreale et. al., 2007), it is worth paying attention to the non-verbal context of communication in education. On the one hand, one can speak about public communication (lectures), during which non-verbal feedback becomes particularly important. On the other hand, one can talk about interpersonal communication based, to the same extent, on non-verbal and verbal exchange of information. This interpersonal communication can take place even in the situation of consultations during which the lecturer meets the student and explains his doubts, answers questions about specific topics and problems. In both of these cases – the non-verbal communication plays an important role in both types of communication situations. The non-verbal behaviours are obviously not visible in the form of feedback, but their significance is not limited only to the information function. In the context of non-verbal behaviours, one can talk about the implementation of such functions as exerting an impression, building relationships, sharing emotions (getting infected with emotions) and completing verbal messages.

Non-verbal communication in the teaching process

Non-verbal communication is not related to words, so it consists in exchanging information without using words, it is a type of communication carried out "through means other than words" (Knapp & Hall, 2000). One can distinguish several basic types of non-verbal communication, which include:

1) Apparition – physical appearance, clothing, make-up, jewellery, etc.
2) Chronemics – time of speech, waiting time for the interlocutor
3) Haptics – touch

4) Para-language – non-verbal aspects of speech, e.g., speech rate, volume, tone of voice, timbre. "Vocal signals consist of all sound properties that can transfer meanings an have certain measurable functions in interpersonal communication" (Leathers, 2007)
5) Kinesics – body language, i.e. gestures, postures, manner of walking
6) Proxemics – the use of space as a communication signal

All non-verbal messages mentioned above are used not only to exchange information, but can also be used by the interlocutors for self-presentation purposes. An example may include ingratiating strategies, which relate to arousing fondness, e.g., with the use of a smile. A student, whose aim is to arouse fondness and draw the attention of the lecturer to his person, during the lecture may use feedback in the form of a smile, nodding, eye contact, in order to show that he agrees with the speaker, accepts his statement or considers it fascinating and interesting. All this to inspire fondness. Non-verbal communication serves in this case the impression, but also takes the form of persuasive communication. The right image of a given person may be a tool used to induce the interlocutor to change behaviours, to adopt a certain attitude or opinion.

In the sphere of self-presentation, or the building of relationships, chronemics also becomes important, the approach of the interlocutors to time and its use. As observed by Głodowski (2006), time can be treated as:

1. The category of non-verbal communication
2. The dimension of the situational context, because all interactions take place and happen in a specific time dimension
3. The main factor of cultural differences in the sphere of non-verbal communication

Considering all non-verbal behaviours used in teaching situation, it is worth emphasizing that they serve not only to complement, accentuate and supplement the verbal message, but also constitute an important factor for building the right atmosphere of work, encouraging the students' involvement in the work and tasks they carry out, and they can also serve to build proper, correct and good relations with students (pupils). The lecturer, through non-verbal messages, may not only arouse the students' interest and curiosity, willingness to explore the issues discussed, but also can build relationships with students, point to their commitment, willingness to cooperate and communication openness. This openness can be understood, on the one hand, as a desire to understand the student's point of view on the issues and problems discussed, and on the other hand, as seeking agreement and willingness to share information – sharing knowledge and experience. Proxemics deserves special attention in this area. The use of space is an important element of educational communication, being a tool that can be used to build a friendly atmosphere of teaching, effective communication and increasing motivation to learn. The décor of the lecture halls,

their size, the locations of the seats – these are the factors determining the effectiveness of the didactic process.

Proxemics in didactic situations

Space is an important factor determining the quality and effectiveness of interpersonal communication, also in relation to the teaching process and the transfer of knowledge. Leathers (2007) states that "the way we use space certainly gives meaning. All over the world, different meanings are communicated through various means. The beliefs, values and significance of a given culture are also communicated by how people use space." Interior design, size of the room are important messages for interlocutors, able to determine not only the nature of communication, but also influence the self-presentation. "We now know that the decorative elements that we decide to place in our offices can significantly affect the main aspects of our image, and in particular the assessment of our credibility" (Leathers, 2007). Therefore, one can talk about a certain relationship between the question of credibility, building the right impression, and the way of arranging the available space. In the case of professional life, one can talk about the use of space as determining factor and indicating the status and possessed power. The size of the office, the way it is furnished constitute important messages regarding the person's image being built. On the one hand, the use of space allows us to shape the impression exerted on others, and on the other hand, determines the behaviour of the interlocutors. Therefore, it is worth paying attention to the use of space and its importance in the sphere of teaching.

Proxemics is defined as "a study of how people use space to communicate" (Leathers, 2007) Issues regarding the arrangement of furniture, chairs, tables, proximity or distance, in which the interlocutor remains undoubtedly determine the nature of communication, also affecting its course, length and the way of expression. Too large a distance can cause that the interlocutors will not be able to communicate effectively, or will not be able to provide all information in a way they would be able to at a smaller distance. In the case of school rooms, lecture halls, one can talk about the appropriate arrangement of seats for students and pupils, in a way that increases the teacher's and lecturer's control over the process of sharing knowledge and student behaviour. One of the important factors determining communication is the size of the lecture hall, the amount of space available to every listener – the space that they can consider as their own territory. "It was calculated that the most optimal space for the average student, expressed in square meters, is in the lecture hall – 5,8 to 8,2 m^2, in the room for studying - 6,1 to 8,8 m^2, in a library 7,3 to 9,4 m^2 and in a discussion group – 9,4 to 13,1 m^2, (Acc. to Leathers, 2007).

The terms, such as territory, congestion, density, privacy or the proxemic environment are associated with proxemics. The sense of congestion remains an important issue, which can lead to discomfort and negatively affect issues related even to focusing attention. It is worth adding that congestion does not mean the same as density. As D. G. Leathers (2007) remarks, "congestion should be clearly distinguished from density. Density is a concept that is defined in strictly physical categories. Density refers to the number of people on a given space unit. Congestion – on the contrary – is a psychological concept". Although objective measurements may indicate that a specific number of people (e.g. five friends) in a small room should feel crowded, it does not necessarily mean that each of them feels similarly crowded. Therefore, congestion is a psychological concept, in addition, "the sense of congestion is subjective as much as it depends on who else is involved, when and where it happens, and why and how it happens". This feeling of congestion can therefore have an impact on the effectiveness and efficiency of the interpersonal communication process, especially in the context of satisfaction that should be provided by the sender and recipient of the conversation. (Leathers, 2007) Thus, density is a concept that is easy to measure, and it is different in the case of congestion, which refers to the emotional state "that can develop in both high and low density conditions." (Knapp & Hall, 2000)

This feeling of congestion felt by the students and pupils can bring negative effects, which D. G. Leathers (2007) writes about, among others, which includes reduced quality of tasks, difficulties with attention or aggression. In a situation, in which the student feels that his/her personal space has been disturbed by other students, he or she experiences a feeling of congestion which may even result in aggressive behaviour. Therefore, an important issue is to draw attention to the preferences of students regarding personal space. Of course, the subjective feeling of congestion is determined by many factors, such as (Knapp & Hall, 2000):

1) Environmental factors, which include, among others, limited space, irritable or unnecessary sounds, or the lack of necessary resources
2) Personal factors, which may include, for example, gender, personality traits, indicating low self-esteem, individual experiences related to finding themselves in situations of congestion
3) Social factors, which include, among others, unpleasant interactions, e.g., in hostile conditions or a significant number of social contacts that take place at a close distance
4) Factors related to the implementation of goals, which include the lack of the ability to implement their own expectations and desires.

Summary

The importance of using space in the sphere of interpersonal and public communication and education is unquestionable. The interior design, the distance between the lecturer and the student, the sense of congestion are just some of the factors determining the quality of educational communication. Non-verbal communication, including proxemics, is an important factor determining the quality and effectiveness of knowledge transfer process to students. Although discussing issues related to public speeches and lectures, first of all, attention is paid to the language and clarity of expression, it should be noted that non-verbal communication that complements words is an important factor used not only to build the impression of others, communicate information and emotions, but also to build a lecturer-student relationships.

In the field of proxemics, it is worth paying attention to the distance that academic teachers retain in relation to students during the lecture. "If the teacher wants to draw the attention of the whole class to important elements of the teaching content, then he should increase the distance between students and the public sphere." (Sztejnberg, 2007) In a situation, in which some students lose interest in the problem, the distance should be reduced. Reducing the distance increases the chances that student activity and involvement will increase. (Sztejnberg, 2007)

It is worth emphasizing the fact that in the sphere of communication serving the transfer of knowledge and information, serving the teaching and transfer of experience, either in the form of a lecture or direct conversations with a small group of two or three students, it is important to pay attention to the consistency of verbal and non-verbal messages, and the importance of non-verbal behaviours in the sphere of complementing and supplementing verbal messages.

The strength of verbal messages can be magnified thanks to non-verbal messages if they are used correctly and properly. The conscious use of tools and forms of communication fosters building the right atmosphere of teaching and building a satisfactory teacher-student relationship. It is also worth remembering the importance of non-verbal behaviours in the sphere of intercultural communication, as well as communication barriers resulting from cultural differences. These differences may concern issues related to the approach to time, punctuality, distance that interlocutors maintain among themselves, etc. Of course, it should be remembered that other spatial needs, other privacy needs may apply to students belonging to one group. Just as the lecturers differ in terms of their preferred didactic methods, whether they take a seat at a desk, stand or walk around the classroom during lectures, so students can have different approaches to this type of issue.

Considering the above differences and challenges in the field of educational communication, it should be remembered that the university, the school "must satisfy the students' needs and create an educational space, in which both the student and the teacher will be able to succeed," (Lesz-Krysiak, 2016) and they will feel satisfaction and fulfilment with the quality of public and interpersonal communication processes that form the basis of the learning process.

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HIGHER EDUCATION AND GLOBAL COMPETENCE: RENEWING THE EDUCATIONAL CONCEPT OF UNIVERSITIES IN RUSSIA

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Abstract. *The world is changing at an increasing pace. We are living in a time of dramatic transformations such as globalization with its impact on economic competitiveness and social cohesion, international mobility, new occupations and careers, advances in technology and its use. Such processes affected the higher education of many countries, including Russia, and created the concept of global education. Nowadays our students have the opportunity and challenge of living and working in such a diverse and rapidly changing world. Thus, renewing the educational concept of universities is becoming relevant. In this article, the authors consider definitions and dimensions of global competence as an essential component of training young specialists as well as 21st century learning in the context of global competence. The authors present how global competence is defined as the combination of the four dimensions and how each dimension builds on specific knowledge, skills, attitudes and values: Also, the paper considers the ways of renewing higher education in Russia and points of growth.*
Keywords: *21st century skills; global competence; globalization; globally competent student; higher education; educational concept.*

Introduction

Since the middle of the 20th century, globalization has determined the entire course of the world development. Globalization is an objective reality in which «Russia should be integrated into a global world», «participate in the Bologna Process»; however, with an indispensable condition – to adopt the best practices of other countries for Russia's environment, preserve the identity and dignity of Russian education.

What we are facing today is very profound problems in our higher education and science. Over the past 20 years, we have completely lost international competitiveness in these areas. We need radical changes. The first thing to start with is to reconsider the higher educational system. By reconsidering we mean the process of renewing the educational concept of universities in Russia.

In the modern world education is the foundation of economy based on the knowledge. Two decades ago universities' main task was to train specialists for

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specific jobs but now it is not enough for the 21st century society. Many of them (universities) make use of methods dating from the mid-20th century. «We are the inheritors of the educational system of the industrial age. If we do not make it fit the needs of the new economy and new social processes, our civilization is bound to lag behind» (Public Chamber of the Russian Federation, 2008). Education must enable a person with an opportunity to broaden his/her professional and cross-cultural horizons. Today is a world of creative individuals who desire and are capable of taking responsible decisions in the context of free choice, living in a multicultural environment. As a result, modernization of higher education itself becomes vital. There is a need to develop a new model of education that would bring to the person awareness and understanding of the catastrophic position of the Planet and humanity as a whole in all its aspects (ecological, economic, moral, etc.). Nowadays, every person must first know about the global dynamics of the world and, moreover, understand that in the current information society and the extremely unstable political situation in the world, it is not enough just to «know», to have «skills and abilities», to adapt to the environment. We need personal qualities that would allow us to change the world for the better, be able to anticipate unknown challenges and threats, consciously and actively oppose them. In a word, a modern person should be creative and responsible (Ilinskiy, 2012).

The purpose of the article is to consider global competence in the context of higher education and show the importance of renewing the educational concept of universities in Russia.

The aims of the article are the following: (1) to consider the definitions and dimensions of global competence; (2) to reveal four dimensions of globally competent students; (3) to consider the ways of renewing higher education in Russia.

Research Methodology

The selection of scientific literature resources for this research paper was criterion-based. The criteria were the following: (1) the resource had to be scientific (based on research or conceptual evidence and published as an article, monograph, PhD dissertation or a research report); (2) the keywords for selection were 21st century skills, global competence, globalization, globally competent student, higher education, lifelong learning, mobility; (3) the resource could have been written in Russian or English languages.

«The research paper employs the method of literature review which is an account of what has been published on a topic by accredited scholars and researchers. In writing the literature review, the purpose is to convey to the

reader what knowledge and ideas have been established on a topic. As a piece of writing, the literature review is defined by a guiding concept» (Taylor, 2010). The performed steps of the literature review were as follows: (1) organizing the literature selection and review by relating it directly to the research question the authors develop; (2) synthesizing results into a summary of what is and is not known; (3) identifying areas of controversy in the literature.

Global Competence: definitions and dimensions

The concept of global competence has been investigated by academics and researches for the last three decades. We have examined an array of definitions to address the issue of what the global competence is.

Curran (2003) associates global competence with a «developed appreciation of other cultures and the ability to interact with people from foreign lands». Also, Curran suggests that global competence is when you are able to learn new environment without difficulties while experiencing it and reflect upon the experience at its completion (Curran, 2003).

NAFSA: Association of International Educators (2003), presents global competence as one of its association's priorities, and suggests one can become globally competent by studying abroad. However, the association does not provide the definition of global competence (NAFSA, 2003)

Hunter (2004) explains the term by defining the human's personality as the one who is «having an open mind while actively seeking to understand cultural norms and expectations of others, leveraging this gained knowledge to interact, communicate and work effectively outside one's environment». According to the author, global competency includes such credentials as knowledge, skills, and attitudes that students can acquire from their educational experiences (Hunter, 2004).

Providing the definition, Fernando Reimers (2010) stresses a view on the nature of global competence: «the knowledge and skills that help people understand the flat world in which they live, the skills to integrate across disciplinary domains to comprehend global affairs and events, and to create possibilities to address them» (Reimers, 2010).

The US National Education Association refers to global competence as the acquisition of in-depth knowledge and understanding of international issues, an appreciation of an ability to learn and work with people from diverse linguistic and cultural backgrounds, proficiency in a foreign language, and skills to function productively in an interdependent world community (Van Roekel, 2010).

Another definition we find in the book «Educating for Global Competence: Preparing Our Youth to Engage the World» given by Bryan Melnick who relates

the competence to a specific skill: «global competence isn't as much about knowledge of other nations as it is about the skill of relating to people of diverse backgrounds» (Mansilla & Jackson, 2011).

Global competence Task Force under the auspices of the Council of Chief State School Officers EdSteps initiative (CCSSO-EdSteps) and the Asia Society Partnership for Global Learning describes global competence as «the capacity and disposition to understand and act on issues of global significance» (Mansilla & Jackson, 2011).

Bird Bear (2017) refers to credentials needed for contemporary world: «global competence is vague and an umbrella term in some ways, but it's really the knowledge, skills, and attitudes that you need to thrive in a global environment, marketplace, or the world today» (Bird Bear, 2017).

Considering all the above definitions, we may conclude that they all have some common features. So, for example, all the researches mention interaction as an important criterion, particularly communication with people from diverse backgrounds. Some of the scientists outline the cultural component in their definitions.

In our research, we draw on the definition provided by the OECD Programme for International Student Assessment (2018) which includes all the components that reveal the content of the «global competence». Global competence is described as «the capacity to examine local, global and intercultural issues, to understand and appreciate the perspectives and worldviews of others, to engage in open, appropriate and effective interactions with people from different cultures, and to act for collective well-being and sustainable development» (OECD, 2018).

The above definition indicates four key dimensions of global competence that the higher educational system in Russia needs to focus their students on to become successful in the 21st century: «(1) the capacity to examine issues and situations of local, global and cultural significance (e.g. poverty, economic interdependence, migration, inequality, environmental risks, conflicts, cultural differences and stereotypes); (2) the capacity to understand and appreciate different perspectives and world views; (3) the ability to establish positive interactions with people of different national, ethnic, religious, social or cultural backgrounds or gender; and (4) the capacity and disposition to take constructive action toward sustainable development and collective well-being" (OECD, 2018).

As the focus of our research is the renewal of the higher educational system in Russia in the context of global competence, our target group is students studying in the universities. But before we comment on four dimensions, it is important to mention the fact that Russia is a multiethnic and multicultural state.

In the globalized world, every individual is becoming increasingly dependent on changes. «The development of tolerance and the promotion of a cultural dialogue between people with different traditions and views can represent a contribution of Russian education to the consolidation of society» (Public Chamber of the Russian Federation, 2008). Furthermore, today Russia's higher education is becoming more popular among students from different countries. They come to study here diversifying the educational environment. Therefore, the importance of integrating the global competence is obvious.

Speaking about four dimensions, we consider them to be strongly interconnected and interdependent. For instance, students from two different cultural backgrounds who work together for a university project demonstrate global competence as they: «get to know each other better (examine their cultural differences); try to understand how each perceives his or her role in the project and the other's perspective (understand perspectives); negotiate misunderstandings and clearly communicate expectations and feelings (interact openly, appropriately and effectively); and take stock of what they learn from each other» (OECD, 2018).

The following diagram, developed by the OECD PISA (2018), presents how global competence is defined as the combination of the four dimensions and how each dimension builds on specific knowledge, skills, attitudes and values:

(OECD, 2018)

Figure 1. **The dimensions of global competence**

The authors of the diagram put forward the comprehensive analysis of each dimension. We shall make reference to this source while considering them but adopting the content to the context of the higher educational system in Russia.

As noted in their work (OECD, 2018), the first dimension (to examine local, global and intercultural issues) refers to students' ability to think critically while forming their own opinion about the global issue. Those who acquire such skill «draw on and combine the disciplinary knowledge and modes of thinking acquired in universities to ask questions, analyze data and arguments, explain phenomena, and develop a position concerning a local, global or cultural issue» (Boix Mansilla & Jackson, 2011). They also mention media literacy as a requirement. A student who is able to «access, analyze and critically evaluate media messages, as well as to create new media content» can be considered as a globally competent student (Buckingham, 2007; Kellner & Share, 2005).

The second dimension outlines that students are able and willing to consider global issues, other people's points of view and behaviours from multiple viewpoints. The more students get to know about other cultures', the wider their world becomes. «They acquire the means to recognise that their perspectives and behaviours are shaped by multiple influences and that others have views of the world that are profoundly different from their own» (Hanvey, 1975). When students acquire this competence they become able to see through «another cultural filter providing opportunities to deepen one's own perspectives, and thus make more mature decisions when dealing with others» (Fennes & Hapgood, 1997).

The third dimension is about cross-cultural interaction. This dimension explains what students are able to do when they communicate with people from different cultures. They know and understand the cultural norms, styles of interaction and degrees of formality and they are flexible to adapt. Students appreciate a respectful dialogue. It focuses on student's capacity "to interact with others across differences in ways that are open, appropriate and effective". Effective communication is when you are able to understand others and be understood (Barrett et al., 2014).

The last dimension emphasizes well-being and sustainable development. Students here are active and responsible members of society who are ready to respond to any local, global or intercultural issue. They are eager to «improve living conditions in their own communities and also to build a more just, peaceful, inclusive and environmentally sustainable world» (OECD. 2018).

Having considered all the above dimensions of global competence, we can conclude that development of global competence and its integration into the universities' context will make students globally competent which allow them to successfully integrate into the diverse and rapidly changing world.

Renewing the Educational Concept of Universities in Russia

According to The National Education Association (NEA) President Dennis Van Roekel (2010) universities must prepare our students to understand and address global issues and hence re-examine strategies and curriculum so that students can meet the 21st century needs (Van Roekel, 2010). The new higher educational standards, course books and methods should take into account the students' interest in becoming globally competent. The considered above dimensions of global competence are supposed to give directions towards a new curriculum.

Today, the universities still fail to provide the required set of civil and social skills. For example, economics and law should be compulsory courses in all the higher educational establishments regardless their orientation – engineering, human sciences, etc. because these courses should give students practical knowledge that is important for careers no matter in which domain they will be subsequently applied.

The universities «revolution» under the global competence concept also focuses on the internationalization of education. Of course, most Russian modern universities are involved in the international activities but this is usually the most simple, ordinary level of internationalization. At a higher level, the internationalization of higher education can be seen as a process of systematically integrating the international component into the education, research and public activities of universities.

NEA (2010) proposes some steps that universities can take to promote global competence: (1) "align teacher preparation programs with global perspectives; (2) design and support professional development programs with a global focus; (3) find new ways to foster international exchanges; (4) expand the teaching of foreign languages" (Von Roekel, 2010). Realizing these steps we will be able to solve academic mobility and internationalization of curricula problems.

The university curriculum should be reconsidered taking into account the following aspects to meet the requirements of the 21st century: Information and Communication Technology literacy, knowledge, innovation skills, thinking, media and real-life experience in the context of core university subjects (Paige, 2009). Authentic learning is also one of the criteria for the 21st century therefore students should engage in the educational environment effectively and develop 21st century skills through critical thinking, collaboration and problem solving. According to Lombardi (2007) "in this way, students will be prepared with the necessary knowledge and life skills that will help them be successful in their future careers" (Lombardi, 2007).

The educational concept should focus students on the development of knowledge and motivate them to become global citizens with a set of 21st century skills. Also, Lombardi (2007) states, the curriculum should be linked to the real world which will motivate students' participation and understanding of the academic subjects, as well as prepare them for adult life (Lombardi, 2007).

According to the Prime Minister of Russia Dmitry Medvedev, our universities cannot always meet the requirements of the modern world. Therefore, the improvement of our universities is among the priorities of our education project. Since 2007, Ministry of Education and Science of the Russian Federation has been creating a network, which currently consists of 40 leading Russian universities, including traditional universities, federal universities, and national research universities like the National Research University of Electronic Technology. Universities are expected to become competitive internationally. To achieve this aim, the Government launched a special project in 2013 and selected 14 universities through an open tender that received additional funding to address the considered above issues. From 2013 to 2015, 88 applications were filed and 21 universities became winners. In 2016, the project "Flagship Universities" was launched to raise the effectiveness of universities at regional as well as international levels.

Samara State Technical University is one of the higher education institutions to have won in this competition. The government has provided support in the form of subsidies. The university has created its own development programme to be implemented within the period of 2016-2020 to address the issues set by the government. Traditionally, the mission of the university is to develop students' knowledge and skills; educate a harmonious person who has the capacity for continuous self-development and is aimed at successful problem-solving. At the new stage, the university as a regional flagship higher education institution focuses on the creation of mechanisms to develop interdisciplinary competences which will help to meet the needs of 21st century.

According to the development programme, the structure of the university is being changed. The key elements are the institutes, project management centre, project-based learning centre, expert council and project teams implementing new principles of educational process. The educational process is being implemented on the basis of the modular principle. There is a unity of educational space in terms of humanitarian, socio-economic, natural-science and general professional training for 1st and 2nd-year bachelors and the flexibility of variable components of professional training. The new educational programme is aimed at achieving such learning outcomes as interdisciplinary and meta-professional competence, "soft skills", providing effective application of professional competencies for the future career.

Samara State Technical University is working towards global perspectives. For example, university staff and students take part in international grant programmes, such as Erasmus+ to increase the low level of student mobility and improve teaching staff quality. Apart from that, there is a centre for academic mobility where students and teachers take foreign language courses for different purposes to be able to present the university at the international level.

Conclusions

Today we are living in the world of globalization which means the conventional approaches to higher education don't meet the requirements of 21st century. Hence, there is a need to move towards global competence in the context of higher education. Having considered an array of definitions and dimensions of global competence proposed by various researches and scientists we have distinguished the main features of global competence which show the direction to the higher education of the future. If we want to integrate global competence, universities need to reconsider the entire existing system of higher education with the focus on the global skills development.

The Ministry of Education and Science of the Russian Federation has already launched programmes to help Russian universities become competitive and prestigious internationally. Nearly 40 universities have received subsidies from the government and are working towards the new educational concept. For example, Samara State Technical University as a flagship higher education institution has reconsidered the conventional approach and in the process of implementing the new one according to the demands of the global world.

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COGNITIVE MECHANISMS IN THE DIDACTICS OF TECHNICAL VOCATIONAL SUBJECTS IN THE LIGHT OF RESEARCH ON BIOELECTRICAL BRAIN ACTIVITY

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Abstract. *The main objective of the paper is to present arguments about the multidimensional character of effectiveness of school education and to discuss a number of factors that influence the outcome of education directly or indirectly. Assessing the effectiveness of school education sheds light on its current problems and indicates directions for future research on innovative approaches to solving such problems. Preliminary assumptions for research based on EEG results concerning cognitive performance during student learning in technical fields will also be presented.*
Keywords: *teaching, effectiveness of education, modern teaching aids, cognitive process, EEG.*

Introduction

The problem of effectiveness as the most sought quality of education can be considered at many levels. Specialists in didactics often assess the effects of education by means of experimental research aimed to evaluate knowledge, skills or social competences. The evaluation is typically carried out by means of selected indicators, defined in research hypotheses, and related to tasks performed by a student. The knowledge and skills at two given stages are evaluated and compared. Measure of association between dependent and independent variables is verified by means of statistical calculations. Rejecting the null hypotheses and adopting alternative ones is the most frequent way to prove the validity of assumptions and solutions proposed for the main research problem (Prauzner, 2013, 2017). However, the question about a source of the dependent variables remains to be answered. The result of human work is analysed in terms of its assessment according to a certain scale. This paper seeks to offer some explanations of the sources of cognitive activity and to answer questions concerning the behaviour of an individual facing a task to be performed. The topic is very broad, transgressing the borders of pedagogy and involving other domains.

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Many years of observations and research form a basis of a reflection combining a theory of general education and cognitive psychology.

Discussion

As a starting point, it is worthwhile to consider the characteristics of cognitive psychology, as a field of science dealing with human cognition of the reality. From a didactic perspective, all human behaviours and responses result from forming mental representations, created by the operation of certain mechanisms. As defined in a dictionary, *„cognitive psychology is a subdiscipline of psychology investigating cognitive processes and structures and the general principles of the functioning of the human mind. Cognitive psychology is an interdisciplinary domain, drawing on research conducted within biology, psychology, linguistics and information science. Its aims include investigating the mechanisms governing thought processes enabling cognition, such as perception, memory, learning, concept construction and logical reasoning"* (Sillamy, 1994). Such mechanisms are described as cognitive processes, which enable the mind to create and transform knowledge structures and skills in response to previous observations and experiences (Nęcka, 2006). The above mentioned cognitive mechanisms exist due to the fact that the mind processes information, creating new associations and concepts. Cognitive psychology is an experimental science, which means that forming and verifying hypothesis is a part of its paradigm. Because of this, when new behaviors are observed in human beings, attempts are made to offer explanations of such behaviours, also in pedagogical terms. Psychology explains human behaviour in terms of the variety of instincts being a driving force behind human activities, including an urge to attain success. In the behaviouristic paradigm human behaviour is accounted for in terms of reinforcing or inhibiting external stimuli affecting human conduct. Cognitive science recognizes this kind of explanation of human behaviour, acknowledging the fact that stimuli directly impinge on human behaviour. In fact, we are all aware of the connection between stimuli encountered in everyday life, work and education, and behaviour. Such stimuli are received via a number of perceptual mechanisms. As cognitive psychology underscores, thought processes are responsible for the human ability to make decisions about one's actions and attitudes (Anderson, 1991, 2007). Because of this, human being is an individual capable of entertaining representations conducive for creative thinking. According to the psychology of creativity, a creative attitude involves an ability to construct something new or an original style of expressing one's ideas. Creativity can also be seen as a result of human abilities, such as abstract and symbolic thinking. Creative thinking is a means to solving problems. An individual way of solving a problem is an example of creativity, since one's work results in constructing an innovative model of a

solution. *„All is needed for dormant imagination and thoughts to be motivated for undertaking a creative effort is stimulating conditions. Creativity oriented towards higher values engages not only our reason but also feelings, experience, desires and fear." „The most frequent cause of imagination and creative thinking being inactive is the lack of stimulating condition and the lack of motivation for undertaking effort"* (Madej, 2006). As is often pointed out, motivating a student to work, should be preceded by an assessment of his/her abilities and limitations. Creative activity can be thus understood as individual progress relative to one's interpersonal skills, abilities and intellect. This standpoint will underlie research to be presented in further considerations and publications concerning cognitive processes, based on EEG and QEEG tests.

Creativity can be useful not only for the environment. It can also be a mechanism for developing personality and social aptitude. Kozielecki rightly observes that "*creativity can be seen as transgressing the limits of one's possibilities* (1980)." The nature of creativity was also discussed by such classical philosophers as Plato, Aristotle, Kant, Schopenhauer and Nietzsche. Similarities and differences between problem solving and creative thinking were also dealt with in a number of works by other thinkers and philosophers, including Dewey (1967), Wallas (1926), Stróżewski (2007) and many others. From a didactic perspective, the education process is based in a correlation of subjects participating in it.

In the era dominated by modern technologies aiding the education process, the model of relationship among didactic activities is aptly represented by a didactic tetrahedron, formed on the basis of two dimensional relations between S (Student), I (Instructor), DM (Didactic Material) and DCS (Didactic Computer System) (Fig.1).

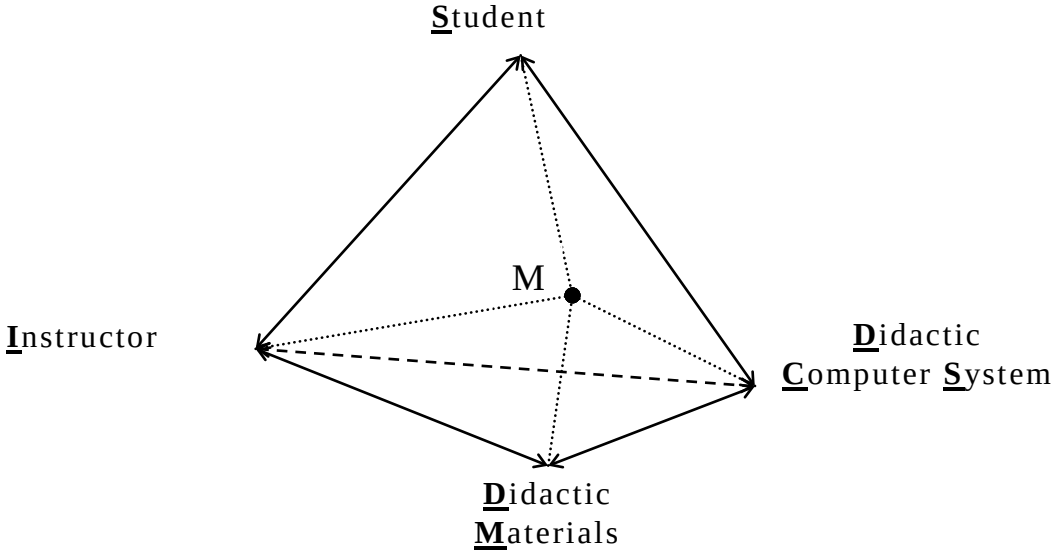

Fig. 1. **Model of relationships between didactic activities** (Barski, 1998, p. 85)

The above-presented model of the didactic process can be modified, depending on the subject, topic of the class, age of students, conditions of providing instruction, etc. The model may not be ideal, as it does not include of the elements of the teaching process, however it is sufficient for the current purposes of discussing effectiveness of education since it provides space for modern teaching aids. Such aids are useful both for the teacher and the student, so their function cannot be overestimated. They include simple teaching aids or didactic materials enabling or facilitating the teaching process. The model represents both one-dimensional and two-dimensional relations. The former are visualised as axes connecting the two extreme apexes of the model: S-DM, I-DM, I-S, S-DCS, I-DCS, DM-DCS. In a simplified way, they capture relationships between two subjects, connecting the three apexes of the solid figure. Naturally, the fourth element is never beyond the didactic space. A randomly chosen point M determines the strength of the connection between the elements of the cognitive process. Its location within the confined space determines the adopted form and method of education, as well as preference for some elements. The didactic computer system can be thus treated as an auxiliary means for raising the effectiveness of the teaching process. Examples of implementations of such as system include simulation software recommended in technical and vocational training (Ptak, 2015, 2016). The model presented above can be considered traditional, since in the era of the development of information technology, didactic computer systems tend to occupy increasingly important place. Their role as aids supporting the traditional learning is continuously loosing significance, as they are being replaced by integrated complex virtual learning environments. The role of the other elements of the tetrahedron is also diminishing or at least changing. Didactic materials are becoming a part of computer software and the role of the instructor is that of a coordinator of the whole process. Even though the role of the instructor is still crucial, it is the one-dimensional relationship S-DCS that is gaining the greatest importance.

According to cognitivists, a student can initiate and exercise cognitive activities and also decide about its results. By processing information, he/she develops new and creative ways of defining a stimulus, in this way choosing a response to that stimulus. Such responses are created on the basis of individual learning within associative memory, combining declarative and procedural memory. Creativity is also affected by abilities and motivation of an individual, which in turn depends on the physical and social environment surrounding that individual. Declarative memory is defined as a relationship between an object of cognition and an event, whereas procedural memory refers to the ability to make use an object's functions. Patterns for reference are stored in long-term memory (in the form of a code), which provides a basis for meta-cognitive knowledge, such as observations, comments, memories, thoughts and decision-making. New

information is confronted in the brain with known information and on the basis of the comparison conclusions are drawn in an attempt to answer questions constituting a part of the task.

Constructivist point out that the effect of the newly constructed knowledge is influenced not only by the magnitude of previously stored knowledge, but also the environmental conditions in which the cognitive process is taking place. The point in question is not only the atmosphere or the number of classmates but most importantly the quality of communication and the source of information. Cognitive theories of learning and teaching play a major role in computer-aided education. Besides, in accordance with constructivists assumptions, the teacher is only a person fostering the learning process, so the educational methods employing modern information technology are gaining significance. Creating new knowledge structures results from, among other factors, using appropriately selected didactic aids. The structures can be remembered for a short time if a situation so requires, but they can also become stored in long-term memory. From the viewpoint of didactic effectiveness, acquiring new knowledge and storing it in the long-term memory is the most desirable. Such knowledge provides a permanent basis for solving problems which may appear in new situations. Thanks to the constructional activity of the mind a new internal cognitive representation of the world is created. Didactic aids in question include computer programmes, especially those offering deterministic computer simulations conducive to technical and vocational learning. Learning then involves creating new knowledge resources by means of modern tools of cognition, representing a complex graphic interpretation of reality. Visualisation, degree of detail in a picture, colours and dynamics of motion are perceived through the sense of sight. In a medical sense, this process can be described in a simplified way as follows:

- an object observed reflects optical waves, which are perceived as a stimulus by the sight organ;
- subsequently, photochemical reactions occur in the retina (coding information), electrical nerve impulses are produced and conducted to the appropriate areas of the visual cortex;
- the newly perceived stimuli are associated with other stimuli originating from other brain areas. Information is encoded and sent to the motor cortex (this is known as programming the response), and subsequently to other parts of the body.

Teaching can be described as polysensory when beside the dominant sense of sight other senses, such as hearing and kinaesthetic experience are involved. As postulated by the Multiple Intelligences Theory by Howard Gardner, teaching methods should be selected accordingly to the polysensory preferences of a student (Gerring & Zimbardo, 2008).

Methodology

The main objective of this paper is to present the results of a preliminary stage of investigations on the cognitive activity assessed on the basis of bioelectrical brain activity in student of technical programmes. The first stage of research on the brain activity assessment will be carried out on the basis of EEG and QEEG tests performed in the Biofeedback Experimental Laboratory at Jan Długosz University in the academic year 2017/18. It is assumed that the final results will prove a significant correlation between the cognitive activity and the use of deterministic simulation programmes in technical education. The research is a follow-up to the results obtained in 2013/14in an EEG laboratory (Prauzner, 2015). Medical equipment for analyzing brain waves in EEG and QEEG will be using in the study (Fig.2). The presence of an QEEG rhythm indicates activity of neural cells at a certain location and corresponds to electrical pulses forming rhythmic patterns of brain waves. For each band of waves generated by the brain, a specific type of neurotransmitters is produced, which affect the functioning of the organism. The best known neurotransmitters include adrenaline, noradrenaline, dopamine, serotonin and endorphins. All the brain wave components are generated all the time but some of them can be fostered at will and by systematic training. By increasing the share of the desired wave bands, we automatically increase the production of the neurotransmitters and affect the functioning of our organism, boosting the activity of the brain regions which are the most important for learning. The following wave bands will be recording and analyzing in the future research: theta, beta1 and gamma. Electromagnetic signals will be recording from electrodes located at various places of the scalp and body such that they show the highest degree of activity: the occipital lobe (responsible for analyzing colours, motion, shape, depth, visual associations, assessment and making decisions and other tasks), the temporal lobe (responsible for the sense of musical and phonemic hearing, auditory perception, speech comprehension, object recognition, object categorization, verbal memory and memorizing); the parietal lobe (responsible for understanding symbols, abstract notions and geometrical relations) and the frontal lobe (responsible for understanding the meaning of words, identifying situations, working memory, volition, temporal relations, control over a sequence of events, planning, responses to external stimuli and simulations in the model of the world) and over.

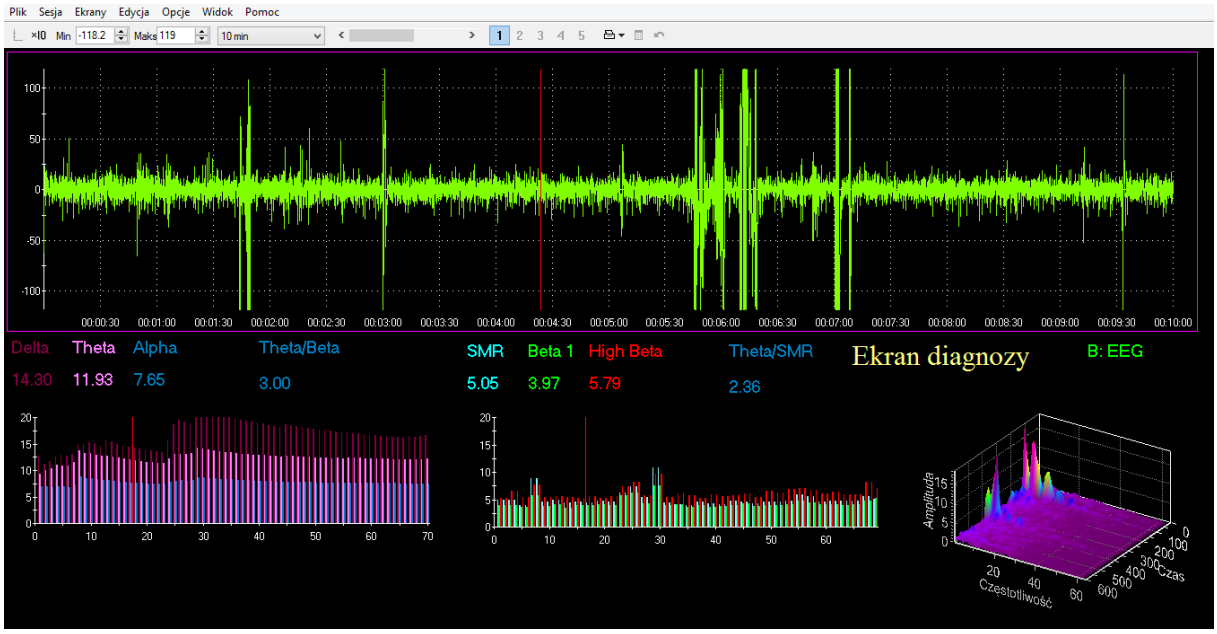

Fig. 2. **Sample (preliminary) EEG research**

The author intends to complement the existing results with new findings obtained by means of more advances software and laboratory equipment. To this end, it is necessary to subject the population examined to preliminary assessment. Because of that, assessing the group under scrutiny with respect to polysensory preferences is justified. The assessment test was based on a questionnaire developed by Kozielska (2012). Students were asked to rate the following statements from *1* (most preferred) to *3*:

- I learn by looking: I have to see the teacher, I prefer to observe a phenomenon directly or a demonstration/visual presentation thereof, such as text, illustrations, graphs, schemata, etc. The information acquired aurally becomes meaningful after it is illustrated and ordered. I construct images on the basis of my thoughts.
- I learn by listening: I listen carefully to what the teacher says, I pay attention to the details of the tone of voice, rate of speech and other vocal features of the messages, the information which is written becomes meaningful to me only when I hear it, I learn by listening to lectures, discussing things, reading aloud or talking to others.
- I learn by touching objects, movement and action: I need to be active, I learn most effectively by examining the physical environment, e.g. by touching, manipulating, constructing, experimenting, or checking the operation of a device.

Results of Research

The research was conducted on 181 students of such programmes as Forensics and Safety Systems, Innovative Technologies and Modern Materials, and Safety Engineering carried by the Institute of Technology and Safety Systems at Jan Długosz University in Częstochowa, in the academic year 2017/18 (Fig.3).[1]

Table 1 **Polysensory preferences of the population under scrutiny**

Preferred option	**I learn through sight**		**I learn through touch**		**I learn through listening**	
	number of answers	*%*	*number of answers*	*%*	*number of answers*	*%*
First	132	73	31	17	18	10
Second	40	22	57	31	84	46
Third	9	5	93	51	79	44
Total	*181*	*100*	*181*	*100*	*181*	*100*

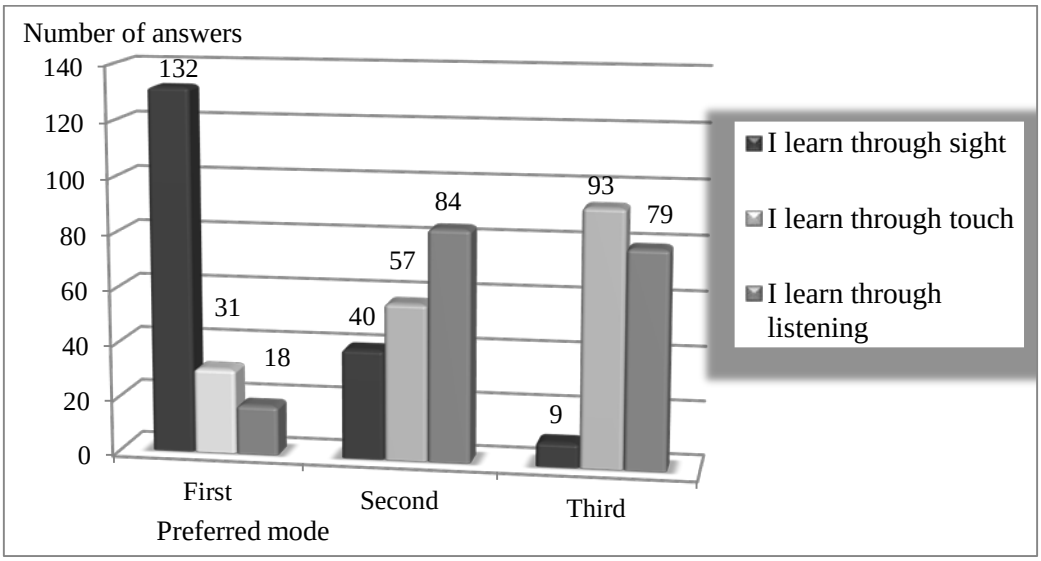

Fig. 3. **Polysensory preferences of the population under scrutiny**

Concluding remarks

The dominant learning mode relies on the sense of sight. The second most preferred mode is learning through the sense of touch (kinaesthetic preferences) and the third one through the sense of hearing. The second position is taken by

[1]Institute of Technology and Safety Systems, Jan Dlugosz University in Czestochowa, Poland, www.iet.ajd.czest.pl [access 22.11.2017]

the preference ordered as listening, touch and sight. The third combination of preferences is learning though touch, listening and sight. 73 % students indicated that sight is the most important sense in the learning process. The sense of sight is then the dominant path of information transmission from the environment to the brain. It is supported by the sense of hearing, and to the least extent by the sense of touch. Visual presentation of contents is therefore essential as it fosters constructing knowledge though images. Of crucial importance is the graphic form of presenting materials, the quality of representation, as well as the dynamic of motion and colour. A picture itself is not however a sufficient source of information, and as the results show, it should be supported by aural information. It can be concluded that using pictures (animations) aided by sound (such as verbal narration provided by the teacher or a computer) caters to the needs of students in the didactic process. To verify the preliminary results, at the next stage of research other methods of diagnosing abilities and limitations of students will be employed, including EEG tests describing brain activity by recording selected frequencies of impulses generated by the activated parts of the neural system. The one dimensional relationship S-DCS appears to be highly significant, which encourages further investigations of the role of modern didactic aids in the learning process.

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UNIVERSITY LEVEL TEACHING STYLES WITH HIGH SCHOOL STUDENTS AND INTERNATIONAL TEACHING AND LEARNING

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Abstract. *The main aim of this paper is to render how university level courses are taught in high school. In fact, we will focus on what styles are used to teach university level courses and illustrate the international contrasts that happen quite frequently. In addition, we will analyse the details of teaching styles that were implemented in the American and the Latvian educational systems. Furthermore, we will discuss what specific teaching styles and innovations work successfully, and what teaching styles and innovations had difficulties and need improvements. In particular, implementing the hands-on teaching and learning styles and repetitive type teaching and learning styles. Moreover, we will also discuss the risk involved with introducing and transforming university level courses and teaching styles with high school students and how to manage these risks.*
Keywords: *hands on teaching style, international learning, international teaching, repetitive teaching style, risk analysis.*

Introduction

It is of paramount curiosity to try new teaching methods in the classroom, especially if we are teaching the same course several consecutive semesters. In addition, when teaching a completely new course it would be interesting to recycle old techniques that successfully worked in the previous courses taught and try new ideas and innovations (Huberman, 1983). Furthermore, we can extend these ideas when we teach the same course or new course in a different educational system in another country (Spendlove, 2007; Radin & Riashchenko, 2017); that of course becomes a bigger challenge and adventure as we are not so familiar with the new system and with the new culture (Radin & Riashchenko, 2017). Thus it is a riveting journey to cross barriers that create these interesting, yet arduous challenges at times. Moreover, a more exciting challenge will be to try to

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transition successful teaching styles and methods in the university classrooms with high school students (Panagiota, Stavrakouli, & Vasiliki, 2016). The vital questions that we will address in this paper are: How successfully will the new ideas work (Tomlinson, 2005)? What problems can occur? How do we adjust these problems (Rosenfeld, 2014)? How do we minimize the risk when we apply new ideas and innovations in the classroom and outside the classroom (Radomska, 2014)? We will discuss how to minimize the risks in the later section of the paper.

In addition, revising teaching styles and being innovative inside and outside the classroom is critical as students' learning styles change from year to year and from generation to generation, due to frequent reforms in the educational systems, due to enhancement of technology and due to international influences as well (Brent & Felder, 1996; Khnyfr, 2005). Especially it is salient to keep up with all these changes and updates that occur on the regular basis (Briere, Macsuga, & Simonsen, 2012). In addition, many international factors also influence new teaching styles and innovations, especially in the American educational system and in Latvian educational system (Radin & Riashchenko, 2017).

The aim of this paper is to portray how interactive, hands – on and repetitive teaching and learning styles have served as the fundamental key to students' academic success and how these innovations enhance the positive learning classroom atmosphere; in the classrooms of American universities and high schools and Latvian universities and high schools. In particular, we will discuss how these particular pedagogical innovations successfully solved several problems as low classroom attendance and low classroom participation which result in poor academic performance. In addition, these specific pedagogical innovations enhanced the communication with students outside the classroom by increasing participation during weekly scheduled office hours and stimulated the students' efforts on the weekly homework assignments. We will also conduct a cross – cultural analysis in the classrooms of American universities, American high schools, Latvian universities, and Latvian high schools. Furthermore, we will compare the differences in the students' preparation levels, students' learning styles, and cultural differences between the American students and Latvian students and how to change and adjust the innovations in the classrooms of Latvian universities that work successfully in the classrooms of American universities. In addition, we will discuss the challenges that can arise when implementing university level teaching styles with high school students and how to handle these challenges. We will apply the data from the last 15 years using regular feedback from the student evaluations and feedback from colleagues. In addition, we will compare the student evaluations before the implementation of the innovations and after the implementation of the innovations. Moreover, student evaluations have been written by more than 800 students from Rochester Institute of Technology, 50 students from Transportation and Sakaru Institute, 60

students from Liepaja University and Liepaja Gimnazia and 30 students from Riga Technical University.

Hands-on Interactive Teaching and Learning Styles

One of the key factors of teaching innovations in the American educational system is to design a more hands – on teaching and learning atmosphere in the classroom and outside the classroom (Hake, 1998). Now the vital question to address: how do we enact these new ideas and innovations (Shields, 2003)? For example, many American universities such as Drexel University and Rochester Institute of Technology offer undergraduate engineering programs that require students to do co – ops or internships by working in a company or for a government agency for at least one semester as part of graduation requirements. How do we proceed with hands on education beyond the scopes of the engineering programs? Several business programs also started offering hands – on education with many hands – on analysis courses. Can this be also be done with high school students to get them prepared to university level education (Matthew, 1996)? In fact, several of these ideas have been implemented already with high school students as co-teaching (Cook & Friend 1995). Several high school in America offer STEM university level programs to their students.

The next fundamental question to address: how do we start hands – on education earlier with freshmen (first year students in American universities)? To address this question, we will share some of Michael Radin's successful teaching styles and innovations at RIT and in Latvia. While teaching his freshman calculus courses Michael introduced the hands – on teaching and learning style with bi – weekly worksheets. Offering students additional hands on practice in addition to regular classroom lectures. During these workshops, students work on problems either in groups or on their own and get guidance if questions or difficulties arise. Michael designed his worksheets with repetitive type problems that give students chances to work out the details a few times and understand the sources of their frequent mistakes that occur in the learning process. Furthermore, this was a golden tool for Michael to monitor students' common mistakes and emphasize them to his students. In fact, these innovations helped Michael decrease the amount of D's and F's (unsatisfactory grades in the American educational system) in his classes by 20 % as he started to implement them. Moreover, 90 % of the students recommend other students to take his classes.

Michael also introduced this hands – on teaching style when teaching his SAT (Scholastic Aptitude Test) and GRE (Graduate Record Examination) preparatory courses at RIT; these are preparatory courses that prepare students to succeed on the entrance exams to American universities. This was an idea that one of his students suggested to him six years ago to digitize the worksheets and

give students real problems to practice that appear on these entrance exams. Michael then designed them similar to his worksheets in his freshman calculus courses with repetitive type problems that offers students opportunities to understand and fix their mistakes. These innovations were successful as at least 90 % of the students recommend to take this preparatory course. We will discuss the principles of repetitive teaching and learning style in the later section.

During his spring 2016 semester sabbatical Michael spent teaching courses in different universities in Latvia. Michael introduced his hands – on teaching style as he taught Introduction to Discrete Mathematics at the TSI (Transportation and Sakaru Institute). Instead of providing worksheets as he did in his courses at RIT, Michael assigned students weekly homework assignments and would give students opportunities to work on problems during class. How did the students react to his innovations? The first students' reaction: how are we supposed to solve the problem when you have not taught us anything yet? Michael then explained to the students that you do not learn as effectively by watching others; "You have to try it yourself" and offered the analogy that you do not learn to drive a car by watching someone driving a car. It took the students about two weeks to get acclimated to this new hands – on teaching and learning style and gave Michael very positive teaching evaluations. Michael took a risk by implementing his American hands – on teaching style and did experience some problems with cultural differences between America and Latvia but fortunately he was able to convince his students why this will help them widen and enhance their knowledge of the material. We will discuss more strategies how to minimize these potential risks in the later section of the paper (Radomska, 2014).

In addition to teaching at TSI, Michael also taught courses at Liepaja University. While Michael was teaching at Liepaja University during the spring 2016, Dagnija Deimante-Hartmane (English Teacher) from the Liepaja Gimnazia asked him to teach a university level mathematics course for their high school students. Michael then decided to teach a different version of his hands – on Discrete Mathematics course as this course can be taught with minimum amount of arithmetic. The class was small size and the students were in the third year of high school with very strong preparation. However, as Michael was not aware of the students' preparation and did not ask the administration any questions about their preparation. Therefore, to minimize the risk of problems Michael started out with material that had no arithmetic and perpetually integrated arithmetic and got a sense of the students' preparation level. His instincts were right as even very well prepared students experienced problems with the arithmetic but did gradually work them out by working on numerous repetitive types of problems. Students gave Michael very positive evaluations, and Dagnija Deimante-Hartmone and the Gimnazia Principal were very pleased with Michael's contribution to the school.

Olga Orlova is currently a Doctorate Student in mathematics at Munich Technical University. Before coming to Munich Technical University Olga did her master's degree at Tallinn Technical University. In addition, Olga had the opportunity to study in the American educational system at the University of New Mexico during the spring 2016 semester. Furthermore, while studying at the University of New Mexico Olga experienced the American hands – on learning style with voluminous amount of homework assignments assigned in all her courses. This caught Olga off guard, as she was not prepared to do this large quantity of homework assignments. She then understood the American principal of education that at least 80 percent of the learning occurs outside the classroom. This was certainly a cultural shock to Olga as a student as there were not homework assignments in her math courses at Tallinn Technical University. However, she did gain a very valuable life learning experience with the repetitive hands on education outside the classroom and helped her understand the fundamental differences in learning and teaching styles that can occur in different educational systems and how to vital it is to acclimate in order to succeed (Hake, 1998; Smallbone & Quinto, 2010).

Furthermore, Olga had the opportunity to switch roles and gave mathematics lessons herself to several middle school students. She did it as a part of a charity project at Tallinn Children's Home. Her task was to give private lessons to students who either had difficulties catching up with the rest of the class or simply wanted to improve their level of knowledge. Sometimes students were not motivated to work on the standard textbook exercises and felt really bored. Olga then decided to experiment with introducing some university level mathematics using hands – on teaching and learning style. Namely, she did not introduce abstract theoretical concepts (which middle school students are clearly not yet ready to grasp), but tried to bring forward the meaning behind the formulas which she explained in simple words and using examples. She started with a problem statement and encouraged students to think about how to solve the problem and at the same time giving them some hints on how to apply university level math concepts, such as numerical integration or modular arithmetic. Thus, even the weaker students were able to solve the problems, as they did not get lost in incomprehensible theory and understood the essence of the problem clearly. Moreover, the feedback from the students was very positive – they claimed that university level assignments were more interesting to solve than the standard exercises.

Repetitive Teaching and Learning and Practical Experiences

As we discussed in the previous section, repetitions can serve as a very vital tool in implementing successful teaching and learning styles. In fact, repetitions

perform as a very crucial fragment during the learning process when studying music and learning to play a musical instrument, when studying a foreign language, and during sports practices (Murgulis, 2012; Yakovlev & Yakovleva, 2014). In addition, psychologists analyse sometimes thousands of repetitions in particular behaviour(s) before coming to any conclusions. Furthermore, the department of transportation analyses repetitions in traffic patterns numerous times before they make any decisions to do any construction projects. From previous teaching and learning experiences, repetitions serve as a vital tool in teaching and learning as students start to realize their mistakes after solving several repetitive types of problems. Furthermore, teachers start to detect students' frequent mistakes after solving several repetitive types of problems, can emphasize the common mistakes to their students and recognize the differences in the students' varying learning styles (Grasha & Yangarber-Hicks, 2000; Iyer, Tversky, & Zacks, 2001).

The next pertinent question to address: how to implement repetitive teaching and learning in the classroom? Majority of repetitive learning occurs outside the classroom when students work on homework assignments. In addition, how to implement these particular teaching innovations with high school students? To answer these questions partially we will provide some examples from personal experiences.

While teaching courses and conducting seminars in various universities in Latvia, Michael Radin had the opportunity to work with several high school students individually one on one and gradually introduced them to university level mathematics. Michael's first experience was with Victor Zommers from Jurmala Jaun Dubulti School in Jurmala, Latvia. Michael worked with Victor one on one by giving him several repetitive type practice problems on fractions, decimals, solving linear equations, solving quadratic equations, geometry problems, word problems, and problems with integers. After two years of such practice, Michael invited Victor with the challenge to take the university level Introduction to Discrete Mathematics course that Michael taught at TSI (Transportation and Sakaru Institute) during the spring 2016 semester. This was the first time that Victor took any university level course. Therefore, the initial experience for Victor was quite immense; in particular, learning new material that he has never seen before and experiencing the new learning atmosphere with university level students only as a second year high school student. Despite the fact that he had two years of training, it took him almost a month to get acclimated to the rhythm. He had to catch up by asking many questions outside the class during office hours and do additional repetitive type problems before the material started to sink in. It was a challenging transition for Victor but a very positive and influential experience that he gained. Moreover, this experience helped Victor to get accepted and succeed at the IB International School in Denmark.

In addition to working with Victor, Michael also had the opportunity to work with Alexei Timchenko, who was a second year high school student in Riga Purvciems Secondary School in Riga, Latvia. Similar to his experiences with Victor, Michael also started to work with Alexei on similar type of repetitive type problems. Furthermore, Michael worked with Alexei on university level calculus from an American textbook: limits, derivatives, integrals, sequences and series. After two years of practice and experience, Alexei was ready for the challenge to take Multivariable and Vector Calculus course that Michael teaches at RIT via skype. This was the first university level course for Alexei as a third year high school student and the first course that Alexei took in English. It took a month for Alexei to sink into the rhythm and he had to ask Michael many questions and work on more repetitive types of problems one on one between the classes via skype to catch up. This experience helped Alexei to succeed when he started his bachelor's studies in the Department of Biological and Medical Physics in Moscow Institute of Physics and Technology in Moscow, Russia. Therefore, from his experiences with Victor and Alexei, Michael acquired new valuable knowledge about balancing out the cultural differences in the American educational system and the Latvian educational system and different learning styles too (Jerkins, 1991; Lynch, 2008; Matthew, 1996; Rosenfeld, 2008; Spendlove, 2007).

Problems and Potential Risks

In the previous section, we shared about some of the successful experiences with implementing methods and innovations to teach high school students university level material (Graziano & Navarete, 2012). However, there were necessary adjustments that were pertinent to resolve some of the problems. Therefore, there is always risk involved that is essential to consider with problems that can occur during the implementation. Now we will ask the rudimentary question: Why there is a risk and what possible problems can arise (Brent & Felder, 1996)? First of all, anytime an idea or innovation is implemented, there is never 100 % that it will be successful (Radomska, 2014). Second of all, problems can occur due to different preparation level of students, due to different learning styles of students (Jerkins, 1991), and due to cultural differences (Radin & Riashchenko, 2017).

For example, Michael Radin has been teaching his hands – on SAT preparatory course at RIT with repetitive types of practice problems for 12 years. Recently Michael was invited to teach the SAT preparatory course at the Rochester Preparatory School in Rochester, New York. Michael applied the same teaching style with repetitive types of problems that he designed while teaching the course at RIT, but very swiftly discovered the students were not ready for this

hands – on style that required them to solve problems on their own during class instead of watching the instructor solving the problems. Michael noticed that these students needed more guided examples and even more repetitive types of problems to get into the rhythm as their preparation level was much weaker than to what Michael was acclimated to. In addition, they were not used to this paste either that Michael was teaching. Furthermore, Michael had to emphasize the main principles much more frequently than in his previous experiences. However, after teaching this preparatory course at the Rochester Preparatory School for the first time, Michael gained valuable experiences and took the opportunity to revise his worksheets with more guided examples and with more repetitive types of practice problems. Moreover, Michael had to teach this preparatory course at a much slower paste than before. The important lesson Michael learned is to expect different learning styles, preparation levels of students and to be prepared to make the necessary adjustments (Jerkins, 1991; Grasha & Yangarber-Hicks, 2000).

The question is not if problems occur during implementation, but how to minimize the risk, how to make future improvements and confront challenges that will arise (Lynch, 2008).

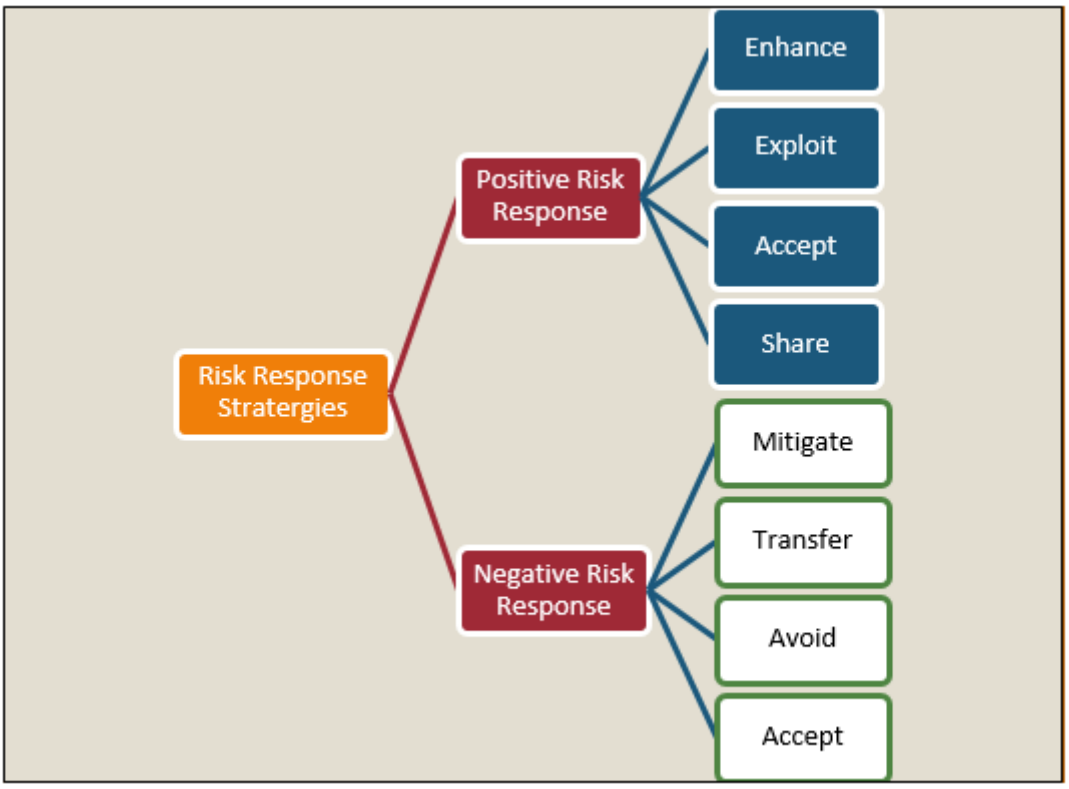

Figure 1. **Risk Management Diagram prior to implementation**

The first step to minimize the risks of failure of a new potential idea or innovation in the classroom is to get feedback from the supervisors or the

administration (Radomska, 2014; Rosenfeld, 2008). In fact, present the idea(s) will all necessary details. It is vital to convince the administration why the innovation will be advantageous to the school and to the students. From Figure 1, the vital question to emphasize: How will the innovation(s) enhance the students' learning and their performance? It is crucial to persuade the administration how and why the innovation will be beneficial. Furthermore, once the administration agrees then it is even more pertinent to their advices and their guidance in the right direction. It is even more crucial to understand that the administrators may see details that teachers do not necessarily see. For example, during June 2017, Michael Radin conducted his seminar on "Developing and Establishing Successful International and Interdisciplinary Research Coalitions" at Riga Technical University in Riga, Latvia. However, before conducting this seminar, Michael consulted with the head of Doctoral School and got several feedback and advices that gave him very beneficial ideas, and thus lead him in the right direction with making several revisions before implementing the seminar. This was the first time that Michael conducted such a seminar and certainly was not yet familiar with the diverse academic atmosphere of graduate students at Riga Technical University. Michael did receive positive evaluations from students; in fact, 84 % of the students were happy with the seminar but did have some suggestions on future improvements.

Figure 2. **Strategy Implementation Diagram**

Therefore, the second pertinent step is to get feedback after implementing the innovations from the students (Shuell, 1986; Smallbone & Quinton, 2010). It is especially vital to make changes and improvements from the feedback before implementing the innovation the second time around. Actually, during the implementation of a certain idea or innovation each time, it is beneficial to assess the students' learning styles and the overall learning atmosphere and make the necessary changes to lead in the right direction as we can see in Figure 2. In fact, while Michael Radin worked with his students Victor Zommers and Alexei Timchenko, he had to make several adjustments to adapt to their learning styles, as they were high school students from Latvia studying university level mathematics. In fact, using the cycle in Figure 2, Michael carefully assessed each distinct situation to design a productive and fruitful learning atmosphere for them.

Conclusions and Future Innovations

In the previous sections, we shared about several successful experiences and some risks and problems can arise during the implementation process due to different preparation levels, different teaching and learning styles, cultural differences and university vs. high school learning atmosphere. Last May 2017 Michael conducted the Annual Math Olympics in American Style event in Riga, Latvia. Michael conducts this annual event in Riga and almost 100 students from 16 different school districts participate in this event each year during the last four years. While conducting this event, students from Riga Technical University High School asked Michael to teach a course for them on graduate level, as these students know Michael’s colleagues from Riga Technical University Department of Artificial Intelligence and Systems Engineering with whom Michael published three research papers. This was the first time that high school students asked Michael to teach such a course. On one hand, it was flattering, and, on the other hand, quite a challenge to some way teach graduate level material on a high school level. From Figure 1, Michel immediately discussed this possibility with the administration from Riga Technical University and got positive feedback to teach such a course. However, he did get several suggestions to teach it as an interdisciplinary course that would also be accessible to students from other school districts in the city of Riga. After his meeting with the administration, Michael wrote a course outline with all the details and received vital feedback and suggestions with what topics to add that would be beneficial to the students. Furthermore, while Michael was designing his lesson plan, the administration also indicated what to omit and what to include.

Acknowledgements

In closing, we would like to take the opportunity to thank our colleagues in Riga Technical University, Transportation and Sakaru Institute, Liepaja University, Liepaja Gimnazia and Rochester Institute of Technology for their support and guidance during the vital process; especially before and after the implementation of several pedagogical innovations. Their guidance and feedback contributed to many successful implementations and also lead to discovery of new innovations yet to be implemented with university students and with high school students in the American and Latvian educational systems.

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EXTERNAL DEVELOPMENT FACTORS OF UNIVERSITY LECTURERS

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Abstract. *In the context of the knowledge society the university teachers face increasing challenges. They are required a wide range of education as well as a constant desire for improvement fallowing up and applying innovations in their work. This article examines the teaching of a university lecturer in a non-formal or an informal way in order to find out what factors lead by representatives of this field trying to improve their competencies as the knowledge creator and disseminator. The survey was conducted by interviewing university lecturers during a semi-structured interview. The results of empirical research have shown that non-formal or informal learning for teachers is an integral part of their professional activity and they tend to pursue their personal interests in the most part in gaining knowledge or new experience to satisfy their curiosity, to satisfy students or to overcome certain challenges. In the professional environment, the impetus for learning is felt through the improvement of the quality of students and lectures, the desire to be equal partners in science to their colleagues and the perception that the teaching profession requires multidisciplinarity. Continuous learning has also been identified as a condition for pursuing a career or simply to maintain a job and meet the high academic requirements of the teaching profession.*
Keywords: university, lecturer, learning.

Introduction

The importance of the continuous learning and teachers' attitudes towards lifelong learning are often discussed and analyzed in scientific literature (Dautaras & Rukštelienė, 2006). It should be emphasized that the features of teachers' training are studied most often and only few researchers review university lecturers' learning, the importance and the significance of acquiring new competencies for the higher education system. According to Laužackas (1999), the improvement of the university teachers' qualification is one of the adult education parts.

As the education system changes, the university teachers are not able to avoid new challenges. They have to not only be proffesionals in their fields with an interest in only their scientific area, but also to be able to pass on the knowledge to the young generation as well as to interest and direct them in the right direction. According to Bélisle (2007), the usual teaching methods are no longer enough to

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interest a student and digital technologies are necessary. Teachers themselves have to want and seek to know these technologies, but if they are not proficient IT (information and computer technologies) users, they would have to improve and practice these skills themselves. This way lecturers are able to engage in a non-formal or an informal learning.

According to the established order in today's universities, university lecturers' activities are evaluated according to their work results, for example, carried out researches, the number of scientific publications and written monographs. However, lecturers' duties also include giving lectures, supervising master's and doctoral theses, providing services at and outside the university, but the professional improvement is also important (Jatkauskienė, 2010). There is still no unified system of how these activities are defined and evaluated and no system of motivation exists. For these reasons, it is not clear what factors lead teachers to learn and improve in order to do their job as best as possible (Tidikis, 1998). Moreover, the teacher has to constantly derive knowledge and learn new things in order to adapt to the changing education system and its needs. This shows today's situation – a lifelong learning. The teachers engage in this by a non-formal or an informal way, for example, participating in projects, internships or individually searching for various kinds of material.

The specificity of the university lecturer's work is exeptional because the representatives of this field, compared to specialists working in other educational institutions, have more autonomy, for example, they are able to independently make decisions conserning their professional activities and careers. Lecturers have the opportunity to decide for themselves how much strength, time and effort they will devote to complete one or another of their activities and how much attention they will pay to their professional improvement. This article analyzes the problem – what external factors encourage lecturers to engage in a non-formal or an informal learning which would help to improve as professionals.

The aim of the research is to identify the external factors which encourage university teachers to engage in a non-formal or an informal learning. The literature analysis and an interview with university teachers are used in the research. The content analysis method is used for the data analysis.

External development factors of university lecturers learning in a non-formal or an informal way

According to Jatkauskienė and Boterf (2012), to answer the question what factors determine the professional level of univeristy lecturers (is it only the number of publications? a degree? pedagogical name? participation in conferences and projects? a positive feedback from students?) what is the structure, areas and functions of university lecturers' activities, typical situations

which are known to many university lecturers, competences necessary to cope with specific situations, ways to become a professional lecturer (learning from the experience, for example, can a person become a professional blacksmith by forging iron from morning till night?) and others, is very difficult. Moreover, researches about lecturers' level of proffesionality is rare in Lithuania and Europe. According to the authors, in today's working world the requirements for a professional became a common feature of the modernity as every employee has to be a professional. However, it is becoming more and more difficult to understand the meaning of the term *professional* because a professional is no longer related to only an emplyee who is qualified, independent, reliable, responsible, creative and enterprising (Jatkauskienės & Boterf, 2012). Therefore, the relevant question is how higher education teachers seek to become professionals in their field, what kind of strategies they use, how much motivation they have and what factors encourage them to seek this goal.

This article analyzes university lecturers' learning in a non-formal and an informal way which are related to each other (Figure 1)

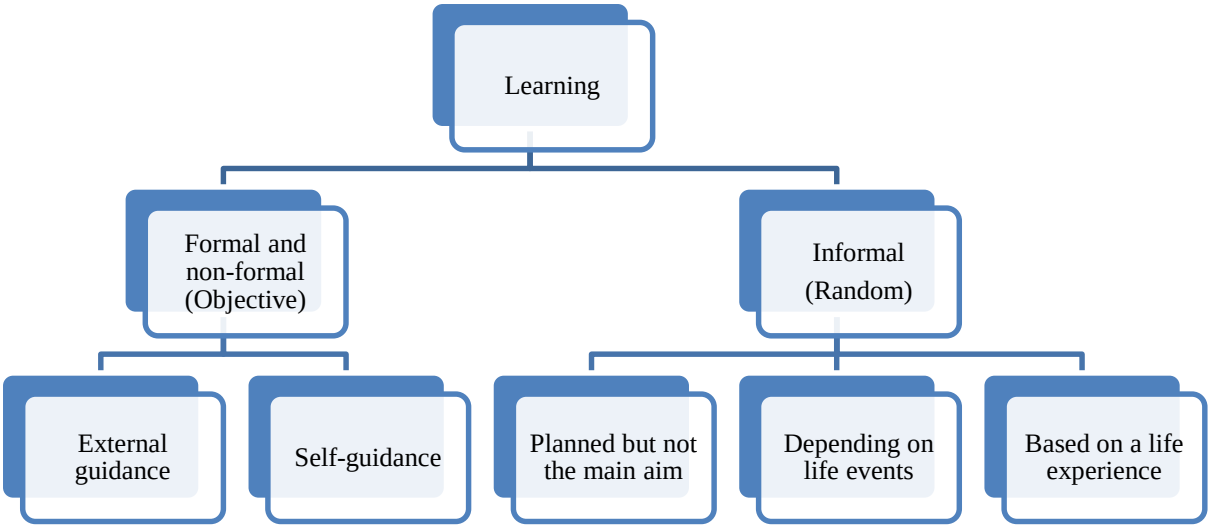

Figure 1. **The connection of formal, non-formal and informal learning**

According to Laužackas, Stasiūnaitienė and Teresevičienė (2005), learning can be targeted, i.e. planned and with an external guidance (requests from friends and family, workplace requirements) or as a result of a self-guidance (for career, for interest). This means that learning can be encouraged by external or internal motivation. Furthermore, the authors claim that learning can also be random, unplanned and then it can be calculated but not become the main aim. The authors point out that the random learning can influence or become targeted learning. However, the targeted learning always contains features of the random learning. This means that the informal learning can be a part of the formal learning. In

addition, there can be difficulties differentiating a non-formal and an infomal learning (Laužackas, Stasiūnaitienė, & Teresevičienė, 2005).

The non-formal learning, according to Bjornavold (2009), is a learning which takes place during activities which are not specifically designed for this, but are planned (learning objectives, time and professional assistance). It is a conscious process for the learner (Cedefop & Glossary, 2008). Werquin (2005) claims that this type of learning has no specific objectives, the scope of time and resources. The non-formal learning is specific for fields, such as the professional, personal improvement (Stasiūnaitienė, Fokienė, & Kaminskienė, 2010) or the qualification improvement (Zuzevičiūtė & Teresevičienė, 2008). According to the data analysis of Schwier (2010), features of a non-formal learning are:

- Defined but unrestricted learning environment;
- Learning is not random but conscious;
- The structure of learning is systematic;
- The learning activities are organized by a responsible person;
- Learners set and control aims;
- Learner are responsible for the learning process.

Concerning the non-formal learning activities, Schwier (2010) distinguishes professional improvement groups where learning contexts are often described as sharing of professional experience and knowledge among group members as well as in learning communities.

The *informal learning*, according to Werquin (2005), is a learning which takes place during every day activities or work, at home or during leisure time. This learning is not organized or has a specific program with established objectives or scope of time. This is often referred to as just an experience.

Laužackas, Stasiūnaitienė and Teresevičienė (2005) describe the informal learning as a natural, every day learning process which can be unplanned, less organized or structured. This learning can also be motivated by life events, circumstances and family and for this reason even individuals who improve their skills and gain knowledge can misinterpret this type of learning. The authors also claim that informal learning is related to an individual initiative, personal experience, hobbies and community activities. Moreover, this learning is based on meeting personal, professional, social and family needs (ibid.).

Stasiūnaitienė, Fokienė and Kaminskienė (2010) distinguish the basic forms of informal learning:

- Reading of books, coursebooks, specialized journals and other publications;
- The search of information on the internet and the analysis of the information;

- Watching educational television programs and video tapes, listening of educational audio records;
- Going to libraries, training centers and other institutions where a person can gain knowledge.

The informal learning is often characterized as unorganized, non-systematic and often unintentional (Schwier, 2010). This type of learning is a lifelong learning process where a person gain and store knowledge, skills, attitudes, insights and wisdom. The informal learning is always motivated by person's needs or curiosity (Schwier, 2010). According to Rupšienė's (2000) monograph about researches on learning motivation and motives, various factors, which can encourage university leacturers to engage in a non-formal or an informal learning, are described in the following table (see Table1).

Table 1 **Factors that determine learning**

Characteristics	Criteria	Indicators
Factors encouraging to learn	**External motives** (Butkienė, Kepalaitė, 1996)	**Wide social** (duty, responsibility, the perception of the significance of social learning) (Podlasyj, 1999);
		Social collaboration (the strengthening of the self-role in the team, orientation into various cooperation with other people ways) (Podlasyj, 1999);
		Public (work for the sake of society and the progress of humanity) (Putkiewicz, 1971);
		Pressure and constraint (from an employer, collegues, society, family) (Rosenfeld, 1974);
	Internal motives (Butkienė, Kepalaitė, 1996)	**Narrow social** (seeking a certain position in the society, to be recognized, to receive an appropriate reward) (Podlasyj, 1999);
		Wide cognitive (interest in the environment, satisfaction of the learning activities) (Podlasyj, 1999);
		Educational cognitive (orientation into knowledge acquisition methods, understanding of learning programs) (Podlasyj, 1999);
		Self-education (orientation into additional knowledge acquisition) (Podlasyj, 1999);
		Practical-professional (the desire to climb the career ladder, have good wage, avoidance of physical work) (Putkiewicz, 1971);
		Learning to succeed and avoid failure (Rosenfeld, 1974);

Table 1 shows that Butkienė and Kepalaitė (1996) indicate two main motives which are influenced by an individual's personal-internal position or by an environment-external position. These motives can include not one component, i.e. a factor. They can be various types and, according to many authors, coinciding but are described differently.

To sum up, Abramauskienė and Kiriliauskienė (2008) claim that internal and external learning factors are very important and they are determined by previous learning experience (successful or unsuccessful), supply or competition, geographical and family position etc. Moreover, in *the Lifelong Learning Memorandum* (2001) it is stated that individual learning motivation and various learning opportunities are essential for successful life long learning process.

University lecturers‘ opinion about the motivation to improve

The scope of the research includes six university lecturers, working at X university, who were randomly chosen. In order to have more accurate results, the respondents had to meet these criteria: 1) to be a university lecturer; 2) to have at least a doctor's degree; 3) to have no less than three years experience working at a university. According to these criteria, two lecturers with doctor's degree, three associate professors and one professor have been interviewed. Their work experience vary from 5 to 29 years.

The research data was conducted through a semi-structured interview which is based on Knox (1960), Lipinskiene (2002) and Rupšiene (2000). This interview includes ten open questions, the first five of which aim at clarifying respondent's opinion and perception of professional development; other four questions explain the impact of a non-formal and an informal learning on the quality of work, personal development or the career prospects; the last question clarifies respondent's perception of what is a non-formal and an informal learning and how it manifests in the professional lecturer's environment.

The research reveals that university lecturers comprehend the basic principles and mission of their work. Although the official work requirements do not indicate that it is obligatory to personally look for additional information and keep up with the latest news, the specialists of this field feel personally obliged to improve in order to justify their and other people's, who will further be discussed in the research, expectations.

The majority of the respondents claim that their decision to engage in a non-formal or an informal learning is often influenced by the following external factors:

- Professional aspects;
- The influence from the environemt;

- Career perspectives (formal requirements);
- Conditions of the work place;
- Financial stimulus.

The professional activity, reaching from the fulfilment of the lecturer's mission to the necessity of knowledge of new programs (see Table 2), encourages professional development.

Table 2 **Professional aspects which influence a non-formal or an informal learning**

Category	**Subcategory**	**Statements**
Professional aspects	The need to maintain the quality of work	If lecturers do not improve, are not interested in anything, they will just be boring. That is all. That is the end of the quality of teaching (R2).
	The need of broader approach	You have to have some broader view and not only think about the subject that you are teaching. And because our lectures are about culture, society, human relationships that means that everything applies to us (R3).
	The fulfilment of the work requirements	Our projects are not just monograph writings but are also adapted for public and the promotion of science. So, you have to teach if you want to or not (R3).
	Regularly updated scientific information	Probably, if you stop improving <…> then you loose the opportunity to understand the latest researches, trends and when you do not have this kind of information you just fall down into a bigger or smaller hole.
	The variety of work activities	Well, students, if you have to supervise their researches and they choose topics which you have to search information for in order to be able to supervise and say something according to the topic. So, in this way students encourage you to broaden your view of life (R5).
	The introduction of new teaching systems	Another thing is that Moodle system makes us think about the latest trends. You have to search for new recordings, examples, submission ways and for this you need to study and know quite a lot (R5).
	The perception of the profession	The fact that you have a doctor's degree is your qualification testimony and nothing more. You are qualified to do the job but that does not mean that you are so good that you wouldn't need to improve anymore (R4).
	The assurance of professional image	We are lecturers and we have to be a step further than our students. But we can do that not in all areas. In some of the fields their competencies are bigger but we need to try.

It is important to emphasize that concerning the category of work factors, which have an influence to lecturers' decisions about learning in a non-formal or

an informal way, the lecturer's profession is very complex and includes not one duty. However, the representatives of this field often engage into other additional activities which motivate them to get better, find or learn something new. Jezerskytė (2014) analyzes the variety of lecturer's activities and claims that the multiplicity of lecturer's work is more often emphasized because a modern university lecturer has to be able to work in various educational and learning environments, to carry out educational, expert, teaching activities, to spread new ideas and scientific knowledge to the society. This means that the area of lecturer's activities is wide, multifaceted and requires complex knowledge. The aim to maintain the work quality and have a wider approach to the profession, which the respondents distinguished as factors motivating to learn, are also discussed by such authors as Tijūnėlienę (1998), Drūteikienė (2010), Juceviečienė, Stanikūnienė (2003), Lekavičienė (1992), Yiyi, He, Munyengabe (2016) and Solis (2015). The fulfilment of professional requirements, which also demand additional knowledge, is described in Tidikis' research (1998). The author studies one of the problems of the higher education gaps in the didactic assessment of lecturers and this problem is still relevant nowadays. Lecturers who carry out the didactic work are not trained for that as this is considered as their own responsibility. This way, which is revealed in this research, lecturers engage in a non-formal or an informal learning.

Furthermore, the installation and implementation of inovations are not news to lecturers. These changes or constantly updated information encourage lecturers to seek additional knowledge which can help them to face these challenges. Tierney (2014) provides the latest information and states that the universities have to be institutions which install new inovations first and it is important for the lecturers to be able to respond to this quickly and apply the information in their work. Regarding the informational and computer technologies (further IT), Jakštienė and Janiūnaitė (2014) argue that IT competence is necessary for todays' lecturer even if not used in the classroom. In addition, it is emphasized that the ability to properly use IT enriches the teaching process.

The factors, such as the influence of the authorities or communication with inspiring people, family support and students' evaluation, are the most prominent factors in the environmental impact category. The impact of these factors on person's desire to learn are described by the researcher Jovaiša (2001). The author describes these factors as social with emphasis on the fact that close relationship with the family can have a positive influence on the desire to learn. The influence of the changing time was emphasized by one respondent and this factor is not discussed more widely in scientific literature.

Table 3 **The impact of environment on a non-formal or an informal learning**

Category	Subcategory	Statements
Enviromental impact	Family support	I always had my family's support. This was never an obstacle throughout my entire academic career wherever I travelled (R2).
	Students' evaluations and seeking for recognition	The same topics of the lectures are being improved every year or at least we should improve them, not just stay in one place. Students then complain that the topics are old (R3).
	The influence of the changing time	No one is interested in these talking heads. <…> What was interesting twenty five years ago is not fascinating anymore and you cannot avoid the development (R3).
	The influence of the authorities	The authorities are authorities because they are followed by others who want to reach their level. This is the positive side as you get the motivation to learn and improve (R5).

Another category of factors found in the research is career perspectives. Lecturers who are determined to stay in the academic community are often motivated to climb the career ladder and they carry out scientific activities in order to defend a higher scientific degree. For this reason, individuals have to make an additional effort to be interested in the information relevant to their work, to attend various training courses, conferences and to complete internships in different universities from all over the world. This way lecturers engage in a non-formal or an informal learning which can improve the ability to receive a higher scientific degree. The career perspectives for university lecturers are defined quite clearly. However, lecturers claim that the implementation of the scientific activities demands the additional learning. This helps the respondents to maintain their job, approapriatly fulfill the work requirements and can guarantee success. The impact of persuit of the career on the desire to engage in a non-formal or an informal learning in the scientific context is explained by Putkiewicz (1971) and Trakšelis (2012).

Another category of factors that influence the lecturers to engage in additional learning is the conditions in their work place. The usage of modern technologies in a university actually has a number of functions. One of these functions, which is mentioned by the lecturers, is the opportunity to use the distance teaching. This type of teaching provides the additional motivation for lecturers to attend conferences, seminars etc. The transfer of lectures into a distance teaching space solves a number of problems, for example, students do not fall behind from the curriculum and the lecturer can simultaneously improve and engage in the core activities. According to Barila (2011), the impact of

information technologies on the university is externally apparent through the services provided. However, this also influences the academic community and this is proven by the research on the opportunities for lecturers to travel and teach through distance learning space. One more important aspect is to get the approval and encouragement from the workplace to learn and improve. The respondents in this research unanimously state that they always receive a significant encouragement and support in the academic environment to broaden their knowledge. Organizations, including universities, increasingly rely on a non-formal adult learning, which is unstructured, unplanned and easily adapted to specific situations, in order to develop skills and encourage the employees to keep up with the innovations (Robbins, 2003).

An important aspect found during this research is the funding opportunities for a non-formal learning. The research reveals that only very small part of the lecturers consider the funding when engaging in a non-formal self-improvement, however, they are searching for opportunities to get sponsorships.

Moreover, some lecturers receive some financial bonuses for their additional learning and this can be considered as a stimulus to engage in these activities. One of the respondents claims that the bonus does not always cover all the costs but that does not reduce the desire to further engage in a non-formal learning.

Conclusions

The results of the research suggest that the nature of the activity is the most prominent external factor encouraging university lecturers to improve. A higher education lecturer has to keep up with the innovations and this is one of the very important factors influencing the improvement. The changing formal requirements for lecturers and the versatility of the professional activities also create opportunities for development. The social aspects, such as students' education, how they evaluate lecturer's work and family support, are also mentioned as factors encouraging to learn. Lecturers who persue a career have to meet certain requirements and their fulfillment is inevitably related to improvement. Not only the macroeconomics are changing but also the internal requirements of the organization and the lecturer, in order to remain active or persue a career, has to meet these requirements and the changes are necessary. The financial terms are not mentioned often as a factor, however, it can also have an impact on the university lecturers' development in a non-formal or an informal way.

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METHODOLOGICAL TRAINING SYSTEM OF FUTURE TEACHERS FOR SPECIALIZED TEACHING AND ITS STRUCTURE

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Abstract. *At present, the system of teacher training for future teachers being formed does not take into account the true nature of the methodological assistance that arises in the process of solving various practical tasks of the teacher. Our research is dedicated to form a methodological preparation system of future teachers for specialized teaching in curricular and extracurricular teaching processes. In the current paper we list the opportunities for learning, teaching and learning, as well as the presence of a leading contradiction between the unidentified functional features of the components that form the methodological system for the training of future teachers in curricula and outside the learning process. Thus, scientifically formulated methodological training allows future teachers to adapt to various changes in their professional assistance, skillfully apply teaching methods and use them by changing, using traditional and innovative approaches flexibly within their pedagogical "laboratory" framework to combine methodological knowledge and skills.*
Purpose of the study: *To develop a system of methodological training of future professional education teachers in the process of study and out-of-class learning and to describe their functional components.*
Research Methods: *studying of the mechanism of conditions in the field of globalization, preservation of the originality, cultural values, customs, traditions, expressing the importance of self-determination.*
Practical value: *According to the system of methodological training provided, the future teacher develops methodological knowledge, business and skill based on subject and metaphorically developed functional character.*
Keywords: *Methodological Training; Functional Assistances; Subjective Methodological Training; General Methodological Subjects.*

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Introduction

There is a need to use a systematic approach in determining methodological training as the object of the study is considered as a system, on the basis of which many types of complicated objects and information are identified and a single theoretical view is made.

In order to define the concept of "methodological training system", it is necessary to understand the concept of the system first. Scientific and pedagogical research has a number of definitions for the concept of the system.

V. P. Bespalko explains that the meaning of the system is a notion that many elements form a single unit that is communicated with each other (Bespalco, 1977; Murasulov, 2015). O. K. Filatov explains the concept of system as interconnected elements that being connected to one another in the functional relationships (Chernilevsky, 1996; Baydaliev, 2016; Poshayev, 2016).

One of the basic principles of systemic communication is its structure. The structure represents the integrated organization of a single system, that is, the way it interacts with the specific components.

Consequently, the principal methodological guideline for the system's development is its sequence and integrity.

Integrity is understood as a defined relationship between the elements, in conjunction with the internally coordinated system component. They have following properties:

- The whole system is integrated with the external environment and is determined by the general condition of the environment;
- Integrity systems are characterized by the existence of systemic factors:
- The whole system will have its own structure, which can be considered as a whole system of its individual components, which can be regarded as a part of a larger system as a whole. That is, we do not limit ourselves to a single-level system in practice; on the contrary, we consider the "partitions" of a single integrated system as a system.

Proposed Model

In order to create a system of methodological training of a future professional education teacher, we have analyzed a number of methodological training systems (Bogatyrev, 1993; Kobozev, 1987; Skamnitsky, 1995). In the first case, the emphasis is placed on the integration of the various subjects in the curriculum of the specialty, with a significant role in the collection of methodological disciplines. In the second case, the system of methodological

training is considered as the management of educational and methodical activities of the future student. V. I. Zemtsova and A. I. Belenok consider tools such as tasks, contents, methodological complex, and results of methodological preparation as different parts of training process in the whole system of methodological preparation. (Belonok, 1996; Zemtsova, 1995; Volodarskaya, 1989; Kan-Kalik, 1990; Chernilevsky, 1996; Skamnitsky, 1995; Konakbaeva, 2013a).

A. A. Derkachev discusses the process of formation of methodological knowledge and skills in the system of methodological preparation of the teacher (Derkachev, 1987; Mukhamedjanov, 2012; Nykyforov, 2009).

Another principle of the system of methodological training is combined with the content of teaching process (learning objective, learning process and learning outcomes).

At the same time, the analysis of scientific and methodological researches indicates that in pedagogical educational institutions the future teacher is a multi-disciplinary system of training, and in most cases the components of the pedagogical system structure are used.

However, future teacher's methodological training system does not take into account the true nature of the methodological activities that the teacher does in addressing the various practical tasks. This is the preservation of the narrow-minded subject relationships for structuring the content of the changing role and importance of methodological activities in future vocational training and the content of future teaching methodologies. It also demonstrates that there is a major contradiction between the functional characteristics of the constituent components of a methodological training system of course lessons and out-of-class learning process of a future teacher. That is why scientifically-methodical training should allow the future teacher to adapt to the various changes in his / her work, to use the traditional methods and methods of teaching within the pedagogical "Laboratory", to effectively use and modify teaching methods, and to combine methodological knowledge and skills.

It should be noted that the functional activity of the research area of methodological training in general pedagogical science is considered as following (Erganova, 2007):

Analytical (analytical): Methodological analysis of the educational process in terms of theoretical and practical activities.

Design: long-term planning and content development, planning and training of teaching activities.

Structuring: Lesson Planning (Content Selection, Composite Formation of Educational Information), Identification of the Form of Training Material.

Calibration: identification and preparation of the means of realization of requirements in the educational process, meeting the educational standards,

educational programme requirements according to the functional features of educational institutions.

Research: methodology of conducting research work aimed at solving methodological issues.

We have reviewed two main directions in accordance with the functional nature of the constituent components of the structural-functional model of the system of methodological training of the future teachers of vocational training (Figure 1).

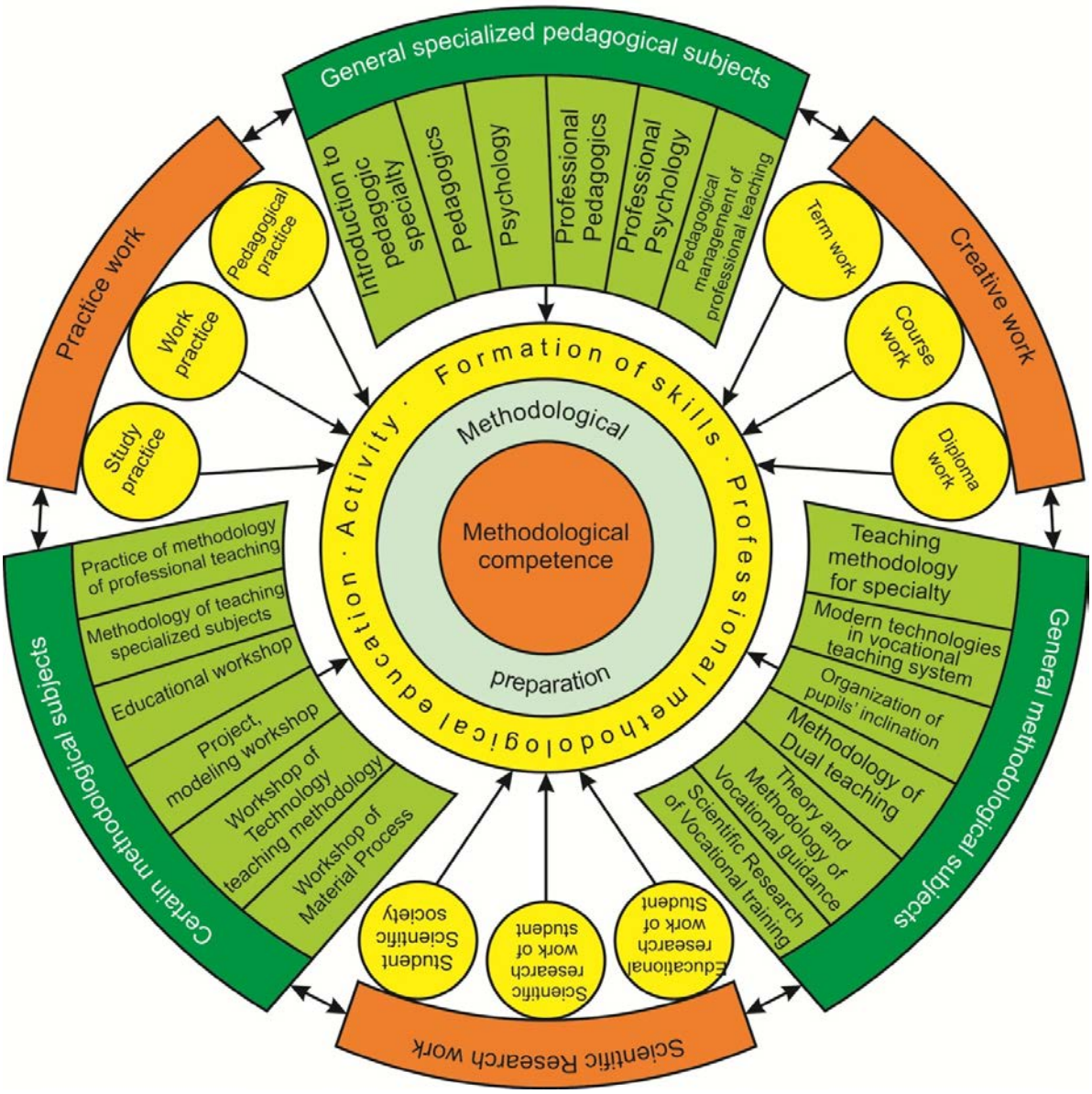

Figure 1. **Structural and functional model of methodical training system for future teachers of professional education**

In the first direction, the methodological knowledge and skills of the future teacher will be formulated in the direct learning process (Kudabaeva, 1995; Omarov, 2013; Omarov, 2016). According to the proposed model, it defines the basic principles that are the basis of methodological training, defined by a set of disciplines based on the curriculum of the specialist training. They are characterized by a series of disciplines divided into three major groups as follows:

1. General professional pedagogical disciplines
2. Collection of general methodical disciplines
3. Collection of autobiographical disciplines

As a result of the acquisition of these disciplines within the framework of the proposed methodological training, the future teacher carries out the methodological preparation functions such as analytical, designing, structuring and exploring. That is, analytical work aimed at improving future teacher's pedagogical activity; analyze the activities of colleagues to solve different pedagogical problems on an optimum basis; calendar thematic planning of the materials provided in accordance with the curriculum, definition of the structure of the lesson, selection of technical and technological information and their didactic processing; selection of working forms; selective analysis of effective educational methods and tools; In accordance with the functional peculiarities of educational institutions, the activities of identifying and preparing tools for meeting the educational requirements, meeting the requirements of educational standards and curriculum are mastered.

In the second direction, the methodological knowledge and skills developed by the future teacher are carried out outside the classroom, mainly during the educational, methodological, scientific and creative work of the student himself (Kamalov 2016a; Kamalov 2016b; Saipov, 2006; Saipov, 2016). Methodological knowledge and skills are divided into three groups:

1. Results of the internship.
2. Results of scientific research work.
3. Results of creative and methodical work.

The following analytical, design, structuring and research functions of methodological training are carried out during the creative and research work of student's self-study. That is, analytical work aimed at improving his pedagogical activity; analysis of the activities of colleagues for solving different pedagogical problems on an optimum basis; analysis of activity of students in order to determine the effectiveness of the pedagogical process and ways of its correction; development of didactic materials; organization of cognitive and behavioral activity of students in the course of lessons; pedagogical partnerships with students, ability to influence emotional senses; Methods of carrying out research works directed at solving methodological problems are studied.

General professional and pedagogical disciplines

As a result of analyzing a set of subjects in the first direction based on the curriculum of the specialty and the formation of the methodological training of the future teacher, there were identified six characterising subjects of “General Professional Pedagogical”. (State Common Standard of Education of Republic of Kazakhstan 6.08.076, 2010). They include: Introduction to Pedagogy, Pedagogy, Professional Pedagogy, Professional Psychology, Psychology and Human Development, Pedagogical Management in Vocational Education.

As a result of studying these disciplines, the future teacher will contribute to pedagogical activity, the formation of professional and pedagogical orientation of theoretical and practical basis of future profession, understanding of its high social importance. At the same time, opening a cycle of pedagogical and psychological disciplines, the future teacher explains the general facts, phenomena, concepts, regularities and methods of pedagogical activity in logical relations with basic psychological, pedagogical and methodological courses.

Future teachers will get acquainted with the system of knowledge about the sphere of education, the essence, content and structure of the educational process, the history of the psychological and pedagogical concepts and the development of subject methods and the current system of knowledge. At the same time, the system of mental development, the system of knowledge about the factors influencing personal growth is mastered.

As a result of the analysis of the curriculum of the specialty “General Methodological Disciplines”, six main subjects were selected. These include: “Vocational Training Methodology”, “Modern Technology in Vocational Education”, “Organization of Professional Education for Students”, “Dual Teaching Methods”, “Theory and Methodology of Occupational Orientation”, “Scientific Research in Vocational Training.”

General Methodological Disciplines

As a result of the analysis of the “General Methodological Disciplines” specialty curriculum, six main subjects were selected. They include: “Vocational Training Methodology”, “Modern Technology in Vocational Education”, “Organization of Professional Education for Students”, “Dual Teaching Methods”, “Theory and Methodology of Occupational Orientation”, “Scientific Research in Vocational Training.”

As a result of these disciplines, the basis of the general methodological training of the future teacher is formed, including design, implementation, evaluation and correction of the learning process, ability to create educational

and programme documents and use them to create educational content. Also, students learn the methods of designing and content of educational and production work, the ways to equip classes with didactic means.

Individual methodical disciplines

In accordance with the curriculum of the specialty, we have included six subjects listed in the "Personal Methodological Disciplines" series. These are: "Practice of vocational training", "Methods of teaching special disciplines", "Practice of designing, modeling, layout work", "Workshop in the workshop", "Practice of Technique of Teaching Technology", "Practice of Materials Processing".

In the course of studying a set of disciplines, the students will learn the peculiarities of the technology of the future professionally vocational training teachers and the methodology of professional work. At the same time, they will acquire the methodological competence of modifying, and analyzing the materials of the students' professional flexibility and skills in accordance with the specific didactic tasks and the level of readiness of the students.

According to the proposed model of the methodological training, the future teachers and methodologists will be taught on the basis of the independent work of students outside the classroom. They will be formed during the course of our internships as mentioned above, in research and creative work.

Students' self-fulfillment work is usually carried out without the direct involvement of the teacher, but under his assignment and under his supervision. The purpose of student self-study is to increase the motivation of students to master the curriculum. At the same time, information competence contributes to the development of researches and the ability to carry out creative work. As a result of students' independent work, a number of functions are implemented that contribute to the formation of methodological training of the future teacher. (Kamalov, 2013). They are as following: systematization and strengthening of the practical skills and theoretical knowledge of students; extension of theoretical knowledge; development of normative legal, reference and special documents in the educational process, development of research activity, acquisition of the ability to study independently in scientific research, professional work, solving actual problems and finding optimal solutions.

In assessing the results of student self-study, a number of principles are considered. They are displayed at five levels:

- verbal and transformation of information (reproductive business);
- ability to work independently on the model (logical business);
- ability to work on a self-regulating self-assessment (the ability to analyze and systematize);

- heuristic ability to work independently (research - research activity);
- creativity - self - study, self - development, self - development design, the ability to transform its activities;

Educational and research work of students is defined by the acquisition of techniques, methods and skills aimed at the development of technical creativity and scientific research on the basis of students' complex activities in the educational process. A number of functions of methodological training are implemented in the course of teaching and research work.

They help to:

- develop creativity in solving practical problems;
- find nonstandard solutions to solving professional problems by developing students' research activity;
- help to develop scientific methods of cognition, creative and advanced directions of teaching materials;
- develop learning methods and tools for the development of research skills, the solution of scientific and practical issues and skills in creative teams;
- form the scientific literature and work skills;

One of the components of the system of methodological preparation is the course work which is carried out independently by the council of students' scientific supervisors.

Final stage of training

Execution of the course work is the final stage of the course~~'s~~ study and, as a result, the student will be able to demonstrate the degree of acceptance and use of the theoretical material.

The course work is considered to be a self-fulfilling study of the student and is presented in a special text of the results of the research work aimed at solving certain problems of logical completion of professional pedagogy. Moreover, one of the main goals of the course work is to develop the students' skills of research work, increase the level of professional and methodical training, deep study and exploring of the research area.

That is why one of the most responsible periods for controlling the level of readiness of the student to solve individual educational work is determined by the results of the course work.

During the course work, the following tasks will be solved to form the professional methodological training of a future specialist:

- the range of theoretical knowledge gained by a professional specialist is expanding, and the ability to apply this knowledge for the solution

of problems in the psychological and pedagogical methodological area of the particular educational process is deepened;
- the ability to use practical skills to solve problems is developed;
- the ability of independent work to search for pedagogical and technical information in solving problems in accordance with the relevance of the work are improved;
- improve the ability of students to independently evaluate and select the concepts, conclusions, proposals that can be used in practical activities of the teacher, as well as the effectiveness of different methods;

It is known that the role of practice in the process of forming a methodical preparation of a future teacher is significant, and therefore, the methodical training system that we offer has a key role in pedagogical practice.

Pedagogical practice as an integral element of vocational training provides students with theoretical knowledge gained in the learning process by including them in the real process of future professional activity and creates the personal qualities of the future teacher with professional skills (Abdullina, 1990).

The activity of students in pedagogical practice is carried out in accordance with the structure and content of pedagogical activity as an analogue of the teacher's professional activities and is realized in an actual school setting. It is characterized by many relationships and functions, such as the teacher's service.

The activities of the student during pedagogical practice are characterized by a number of functions (education, development, upbringing, etc.) and relationships (pupils, parents, teachers, students), such as real professionals. At the same time, pedagogical practice is defined as a form of vocational training based on fundamental special and psychological and pedagogical knowledge, which provides for the principles of professional activity and the principles of practical knowledge. During the practice, internship students are firstly trained by psychologist-pedagogical, social-humanitarian and special disciplines under the guidance of teachers of higher education institutions; secondly, internship students work with pupils, organize their educational and cognitive activities; and thirdly, by communicating with the school's pedagogical staff, get acquainted with their experiences, and improve their professional-methodical level.

During the pedagogical practice, a number of valuable issues that form the basis of professional and methodological training will be solved. They are as following:
- professional teacher is prepared for the whole pedagogical process management;
- the professionalism of the teacher of professional education and the necessity of self-education for pedagogical education;

- formation and development of pedagogical abilities (organizational, gnostic, constructive, research, communicative);
- to solve the problems of social, humanitarian, psychological, pedagogical and special methodological skills, to solve certain pedagogical problems;
- development in professional and methodological skills;
- development of creative, research principles in pedagogical activity;
- constant interest in the profession of a tutor.

Pedagogical practice is one of the most complex multidisciplinary processes in the methodological training of the future teacher.

The diploma work carried out by a student's scientific supervisor, who is a comprehensive integration of the professional teaching methodology of future teachers in higher education institutions, is the final stage of complex methodological training. In the process of its implementation, the student's progressive self-fulfillment skills are improved. There are a number of peculiarities in the diploma work compared with the course works. For example:

- The theme of the diploma work is considered to be of great relevance and size;
- The course of the diploma work is characterized by research and creative orientation;
- Consideration of significant and important issues of designing, structuring, organization, gnostic, technological services in the content of the diploma work;
- Theoretical and methodological approach of the work is studied, its scientific and methodical and practical value is determined.

In particular:

a) The true meaning of the concepts in the educational process is specified;
b) the process of coordination, comparison, systematization and classification of notions;
b) the cause and effect relationships are defined;
c) the ability to apply concepts in practice (State of the art standardization of the Republic of Kazakhstan, State Common Standard of Education of Republic of Kazakhstan RK 6.08.076, 2010).

During the exploring a diploma work, a future teacher learns teaching methodologies such as modeling, designing, structuring, and didactic maintenance of the educational process.

In addition, according to the system aimed at improving the level of methodological training of the future Vocational Training teacher, the

methodological training of the future teacher is a continuous professional pedagogical process for four years. Moreover, during the research, 12 components of the methodological training system were analyzed (Table 1).

Table 1 **Methodological training system**

№	Components of methodology preparation system	Year			
		I	II	III	IV
1	Professional Pedagogical Subjects	+	+	+	
2	General Methodological Subjects		+	+	
3	Individual Methodological Subjects			+	+
4	Educational research work	+	+	+	+
5	Scientific Research work		+	+	+
6	Students' work in the scientific associations		+	+	+
7	Educational-experimental practice	+			
8	Psychological and pedagogical practice		+		
9	Pedagogical practice			+	+
10	Student's term work	+	+	+	+
11	Course work			+	+
12	Diploma				+

According to the Table 1, 75 % of the methodical training of a future teacher is established on 3-4 courses.

Besides, as a result of the experimental practice, it has been established that the process of forming the methodological level of the future teacher can be divided into three main stages. They are as following:

- Formation of methodological bases of methodological training;
- Formation of basics of general methodological training;
- Formation of the basis of subject-methodological training;

The methodological basis of methodological training is determined by the formation of a whole set of professional pedagogical and psychological disciplines in the educational process. Besides, the basis of the methodological training is that the set of general methodological disciplines will be formed in the educational process and in the creative work of the student in his own research work.

Particular methodological training in the third stage revealed that personal methodological disciplines will be formed in the course of teaching and pedagogical practice in course and diploma work.

Conclusion

In the curriculum, the training of specialists, methodological disciplines play a major role and the methodical system of training is considered as the head of educational and methodical activities of the future teacher. In accordance with the model, the methodical preparation of branch disciplines based on the training of specialists is determined. These are “General professional pedagogical subjects”, “General methodological subjects” and “Individual methodological subjects”. After the development and mastery of these disciplines, the future teacher can perform such functions as analytical, project, structuring, standardizing. In accordance with the proposed model of methodological training, the skills of the system that can be developed by the future teacher can also be developed in the process of independently executed work.

According to the system aimed at improving the methodological preparation of the future teacher of “Vocational Training”, the system of forming this level can be divided into two periods such as general methodical preparation and preparation of the basis for methodological training.

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STUDENTS' EXPECTATIONS AND REFLECTIONS ABOUT PIANO COURSES IN FINNISH PRIMARY SCHOOL TEACHER EDUCATION

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Abstract. *In Finland, music subject is part of National Core Curriculum and in the primary school stage (grades 1-6) usually taught by primary school teachers. To assure instruction of music education on a highly professional level, pre-service teachers are taught piano course as part of music didactics.*
This article reports findings of the pilot study carried out as part of ArcTop research project between University of Lapland and University of Helsinki to develop and improve primary school teacher education in both institutions. Students' expectations and reflections are examined through the lens of self-efficacy theory by Bandura (1977, 1986, 1997).
The data were collected using an open-ended questionnaire to find out students experiences in piano playing and music reading as well as their self-reflections about the learning process. The answers (n = 97) were processed statistically and analysed using qualitative content analysis. The results revealed that most of the participants (n = 64) were inexperienced in piano playing. At the same time they were highly motivated and eager to learn and practice. The students also mentioned the lack of elementary music literacy knowledge and the insufficient number of contact lessons which give grounds for making further arrangements in the curriculum.
Keywords: *self-efficacy; music education; primary school teacher education in Finland; piano accompaniment.*

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Introduction

The success-story of Finnish basic school education is widely known all over the world: the equality in education, relatively low level of student assessment, school- and district-level leadership, teacher autonomy and professionalism are the key issues behind that accomplishment, just to name a few (Sahlberg, 2011; Niemi et al., 2012; Reinikainen,2012; Juntunen 2017). The renewal processes in Finnish basic school education, especially in connection with the recent National Core Curriculum for basic schools (NCCBE, 2014), require rearrangements and new approaches also in teacher training.

In this field, University of Lapland and University of Helsinki have been doing a lot of cooperation in sharing expertise and carrying out several studies to improve and develop music courses in primary school teacher training (Hietanen & Ruismäki, 2017; Tuisku & Ruokonen, 2017; Ruokonen et al., 2017; Enbuska et al., 2018).

This pilot study is part of a new research project "Arctic Reformative and Exploratory Teaching Profession" (ArcTop), aiming to support teachers' life-long professional development by organizing research based in-service courses; providing possibilities for cooperation and creating networks between universities and comprehensive schools in Lapland through shared expertise, critical reflections and research. Part of this project focuses on different possibilities for developing piano courses in primary school teacher training.

Music subject and teaching in Finnish basic schools

In Finland, music subject is part of National Core Curriculum of Basic Education (NCCBE) where the main objectives and activities of music subject are stated. The main tasks of music education - to create opportunities for versatile musical activities and active cultural participation- reflect the ideas of praxial music education (Elliott, 1995; Elliott & Silvermann, 2015): pupils learn musical concepts and expression skills through singing, playing musical instruments, composing, moving and listening to music. They are supposed to participate in making music together and building togetherness, take part in cross-disciplinary work in arts subjects and share their experiences with others. The ongoing and fast development of information technologies is observable also in music education, as the new NCCBE emphasizes the use of music technology when composing and expressing creative musical ideas. Thus, the local schools and teachers have the freedom and responsibility to choose the content and methods to achieve these goals (NCCBE, 2014). In grades 1–9, there is expected to be at least eight compulsory courses of music as, meaning that one course corresponds

to 38 contact hours. Music is obligatory subject in grades 1-7 and optional in grades 8-9. In addition there are 11 optional courses (one course corresponding to 38 contact hours) which may also be used for teaching arts subjects (handicraft, music, visual arts), but the decision about the number of hours each subject can use, lies on the local school (Valtioneuvoston asetus 422/2012, Suomen Säädöskokoelma, 2012). The study by Tossavainen and Juvonen proved that music as a school subject is considered enjoyable, but not as useful as mathematics (Tossavainen & Juvonen, 2015).

In grades 1 to 5 music subject is usually taught by the primary school teacher (sometimes referred to also as "generalist"), whereas from grade 6 and up the specialised music teacher continues the teaching (Sepp et al., 2010; Hietanen et al., 2017). Implementation of the music subject objectives presented in NCCBE (NCCBE, 2014), set high demands on teachers' pedagogical abilities, musical competence and skills like singing, playing different instruments, basics of music elementary theory (Anttila, 2010; Saarelainen & Juvonen, 2017; Hietanen et al., 2017).

According to Laitinen, Hilmola and Juntunen (2011), the situation in arts education, including general music education at Finnish basic school faces several problems, such as the insufficient time available for music, modest results in musical knowledge and basic skills (at grade 9 level), inadequate qualification of teachers' teaching music (Laitinen et al., 2011, 14-16). The same tendency is common to educational policy in numerous European countries.

Literature and theoretical background

According to the study „Arts and Culture Education at School in Europe" (ACESE, 2009), in the majority of the observed 30 European countries, generalist teachers are employed to teach music on the primary school level.

Yet, several research results have revealed serious problems the generalists face when teaching music in basic school (Swanwick, 1992; Hennessy, 2000; Holden & Button, 2006; Wiggins & Wiggins, 2008; Biasutti, 2015; de Vries, 2013; Gravis, 2013; Hallam et al., 2009; Russell-Bowie, 2009; de Vries, 2017).

In Finland, primary school teachers are facing the same complications: insufficient musical knowledge and skills have been reported in many research reports (Puurula 1992; Vesioja 2006; Ruokonen & Muldma 2007; Partanen et al., 2009; Anttila, 2010; Saarelainen & Juvonen, 2017; Hietanen et al., 2017; Mäkinen & Juvonen, 2017). According to Tereska (2003), nearly one third of primary school teachers refuse to teach music. Anttila (2010) points out that most of Finnish pre service teachers lack confidence in singing and many of them cannot play any instruments. In primary school teacher training entrance

examinations musical skills are not evaluated in any way. Also, the amount and quality of music courses in primary school teacher training vary a lot across Finnish Universities (Anttila, 2010).

For example, regular music studies for generalists include 10 academic hours of piano accompaniment lessons in University of Helsinki and 20 academic hours in University of Lapland. The decreasing instruction time and limited number of contact lessons challenge to find new solutions to equip pre service teachers with sufficient knowledge and skills in music. It is crucial to motivate students for acquiring skills needed for teaching music professionally. It also means creating supportive learning environments for helping to build students' positive self-efficacy, as it has major implications for their future work.

According to Bandura's social-cognitive theory, the concept of self-efficacy expresses a personal belief system of one's capability to accomplish certain tasks (Bandura, 1977). Several research results confirm that self-efficacy is extremely important when it comes to motivation, learning and academic achievement (Bandura, 1997; Multon et al., 1991; Schunk & Pajares, 2009; Artino Jr, 2012). Bandura also underlines the two important aspects reflecting the task- and situation-specific nature of self-efficacy: firstly, the most beneficial efficacy decisions exceed one's real capabilities, and secondly, individual's efficacy judgements aim to accomplish certain goals (Bandura, 1986). Yet, the mere possessing of the knowledge and skills is not enough - one must also have the conviction to perform the task not only under typical, but also challenging circumstances. As Artino Jr has put it: "Effective functioning, then, requires skills and efficacy beliefs to execute them appropriately - two components that develop jointly as individuals grow and learn" (Artino Jr, 2012: 77).

Self-efficacy beliefs play an essential role explaining phenomena like human motivation, learning, self-regulation, accomplishment. In other words, self-efficacy beliefs have a crucial role in "translating directed goals into actions" (Pajares & Urdan, 2005, ix). According to Bandura: "Belief in one's efficacy is a key personal resource in self-development, successful adaptation, and change" (Bandura, 2006: 4).

There are also significant connections between person's goal achievement, past experiences, internalised values and attitudes shaping one's self-efficacy, as these factors either increase or decrease motivation to participate in certain activities (Mayer, 2008). Accordingly, the higher the person's self-efficacy, the higher goals one sets for oneself. Whereas individuals with low self-efficacy may avoid certain activities to prevent failure or negative experiences (Morris et al., 2017). In the context of teaching this indicates that "self-efficacy is developed through the interaction between an individual's judgement of their teaching ability to perform a task and their perception of the actions required to perform the task

successfully" (Garvis, 2013: 86).

The four key sources that contribute to self- efficacy are: mastery experience (prior task-based achievement), vicarious experience (observation of peers and other role models), verbal persuasion (encouragement from others), and physiological states (emotional conditions, arousal) (Bandura 1997; Pajares & Schunk, 2001). Mastery experiences constitute the most reliable sources of efficacy information, as each success helps to build confidence whereas each failure weakens it (Hendricks, 2016). Self-efficacy focuses more specifically on the tasks or activities that an individual feels capable of performing. Accordingly, a generalist teacher's ability to teach a particular subject is determined by their level of self-efficacy.

Hennessy (2017) argues that less confident student teachers will not be challenged to try music teaching in their future career and later they prefer to exclude music from their teaching responsibilities (Hennessy, 2017).

In order to understand primary school teachers' beliefs, experiences and challenges about teaching music and to help the student-teachers to develop confidence and add motivation for learning musical skills, self-efficacy theory provides good conceptual framework for research.

Methodology

According to Kaplan (1973), the aim of methodology is to help us to understand not the product of scientific inquiry but the process itself.

This pilot study is part of ArcTop design- based research project (2017 - 2019) between the Universities of Helsinki and Lapland for developing piano courses and learning environments in primary school teacher training. Instruction takes place in a piano studio, equipped with digital pianos, headphones and computer. The equipment in the class enables differentiated teaching and individual tutoring. The teaching contains basics of melodic piano accompaniment: accompaniment of melody based on chord symbols to support joint singing in the classroom. Music textbooks of the elementary school and additional materials compiled by the teachers are used as music sources, but students may also choose their own repertoire in accordance with their level of experience. In addition, the network study environments and teaching materials are used. At the beginning of the course, students' backgrounds, wishes and goals are mapped through discussion.

The aim of the present qualitative study is to find out the dynamics and developments in students' efficacy beliefs as the result of piano accompaniment course. Tha data were collected from primary school teacher students (N = 97) in Universities of Lapland (N = 14) and Helsinki (N = 83) after completing the piano accompaniment course in autumn 2017 (September to December) by using

open-ended questions. The questions were compiled to find out about students' earlier experiences in piano playing and accompaniment (self-assessment), goal setting and motivation after taking the course. The students in Helsinki were also asked one additional question - their general opinion and thoughts about the course. The answers of the students from Helsinki University are marked as HPP and Lapland University as LSP. The middle numbers "1718" indicate the years and the end of the code - the student's answer.

The data were coded and analysed using content analysis (Cohen et al., 2007) applying the conventional approach. Content analysis is regarded as a flexible method for analyzing text data (Cavanagh, 1997). Hsieh and Shannon (2005) suggest three distinct approaches of content analysis: conventional, directed and summative. As coding categories are derived directly from the data, the approach used in this analysis is conventional.

Results

The results were analysed accordingly in following basic criteria:

1) **students' mastery level in piano playing.** The results reveal that the students' mastery level in piano playing is very heterogeneous. Out of the total number of respondents (N = 97), 64 students (66 %) evaluated their piano playing skills as "total beginners"(B), 26 students (26,9 %) defined their skills as "some experience in piano playing, but not in accompaniment"(SE) and 7 students (72,1 %) - "experienced in both, piano playing and accompaniment"(PA).

2) **students goal setting.** With regard to the goal setting, the majority of the students (N = 92) set different musical goals to develop skills in piano playing and accompaniment. Students named various elements and components they wished to practice. Their goal setting was usually determined by their evaluated mastery level. Students from group B mainly mentioned playing the melody and bassline, reading music, finding notes on keyboard, learning the triads, playing some primary school songs as their main goals: *I would just like to learn the very basic of piano playing and learn to accompany some primary school songs* (HPP17181069). *I wanted to learn to play the melody from the notes (*HPP17181055). *I wish to learn the different possibilities to use chords and become more confident, to learn the main chords* (HPP17181042).

Some students mentioned that at first they had no goal except to pass the course, yet, they became interested in piano accompaniment during the lessons and plan to continue in the future. *At first I had no more goals to just pass, but as I noticed my progress during the course and understood I can learn to play, I became enthusiastic* (HPP17181079).

The students from group SE where more precise in their goals. *I would like*

to learn how to use different chords in different styles. I would like to make progress in my playing and it would be wonderful to learn to sing and play at the same time, be more creative: make changes in tempo, be more expressive (LSP1718106).

Some had been playing in bands (N = 3), yet lacked the skills to read music. *I have been playing in different bands, I can improvise on piano and I have a good musical ear. Yet, I want to learn to read music* (HPP17181001). *I can play the piano, but in accompaniment and music reading, I am a real "greenhorn". I can play the chords and melody, but not at the same time* (LSP1718103).

As students form group PA had the most experience, they also were more specific in their goal setting. *I would like to get some tips how to develop my playing; to learn more difficult chords (7, sus, add), learn different styles of accompaniment in left hand* (HPP17181008). *So far I've been accompanying my own singing. I'd like to learn to accompany others, I would enjoy it. And to learn new songs* (LSP1718111).

All in all only a few students (N = 5; 1 on SE level and 4 on B level) did not set any goals except to pass the course. *My goal is just to pass. Sorry to say, but I'm just the beginner and too impatient to practice* (HPP17181070). *I am the beginner and had no great expectations considering the small number of lessons. Still, I learned to play melody and 1-5 in the left hand* (HPP17181074).

3) **levels of efficacy beliefs**

Although there were no direct questions about students efficacy beliefs for the piano course, we found several indications that gave grounds to decide about the self-efficacy level of the students.

The majority (N = 78) of the respondents expressed their high level of efficacy for piano playing, either directly: *I am very satisfied with the present situation. I learned the piano basics and some simple songs. I can continue on my own. I wish there could have been more lessons* (HPP17181062). *At first I couldn't play, but it was nice to learn, I even used some black keys. A longer course would have been better* (HPP17181067). *I learned the notes and could play with 2 hands. The freedom to play my favourite music was motivating* (HPP17181063). *I'll do my best to learn although I am the beginner. I learned to accompany about 6 songs every lesson. I got so motivated, that I am going to buy a piano for myself* (HPP17181069). *I started from the very beginning and I was successful. I learned to read the music and found some new songs myself. More lessons!* (HPP17181080).

or indirectly, through reflecting on their accomplishments in the piano course: *I could not set any goals, as I was a complete beginner. The goal set by the teacher (accompany 3 pieces) seemed impossible and I was surprised positively, I could accomplish it. I had always the idea that one has to start in childhood to learn to*

play. I would have started years ago, if I would have known that I progress in playing so well (HPP17181053). *I like to "colour" and fill the chords, add is "my friend". ….I think that developing my skills is fun* (LSP1718111).

Some students' (N = 14) efficacy level was somewhat in the middle, but they still pointed out some accomplishments in piano playing: *I passed it, can play the melody and bassline, but no chords. If I have to teach music, I will use ukulele instead* (HPP17181071). Some notes, need some training (HPP17181058). *Quite clumsy, learned by ear* (HPP17181028). *Seems I had too high expectations, and it disturbs that I could not accomplish my goals. Anyway, I got some new perspectives* (HPP17181005).

The answers of a few students (N = 5) revealed that they did not set any goals (see previous criterion) and did not express enthusiasm about practicing any musical instrument, express low efficacy level.

In addition, students pointed out some really interesting and useful ideas for further piano course planning concerning piano playing ergonomics, theory lessons, computer programmes, differentiated teaching.

Conclusions and discussion

The results reveal the uneven mastery level of piano playing: from the total number of the respondents (N = 97), only 7 students evaluated their piano playing level as "experienced". Most of the students defined themselves as the "beginners" (N = 64) and the remaining (N = 26) has some piano playing background. This gave grounds for expecting the same tendency displaying for the students self-efficacy beliefs. It was evident that goal setting depended to some extent on their prior experiences and achievements: the students from groups SE and PA were more specificwhereas students from group B wanted to acquire the basic skills in piano playing and accompaniment. Yet, considering that the number of piano lessons was only minimal, the idea of being able to accompany simple songs expresses the rather high self-efficacy level of students in group B. According to the study results, there is clear evidence that self-efficacy beliefs have substantial impact on students' goal setting and motivation for piano accompaniment studies.

This pilot study gives further ideas for continuing the study examining specifically the four sources of self-efficacy: prior experiences of mastering tasks, watching others' mastering tasks, messages or "persuasion" from others, and emotions related to stress and discomfort (Pajares & Schunk, 2001), in order to find more and different ways of encouraging students' self-efficacy beliefs connected with piano playing and accompaniment.

The importance and value of the arts education (including music) in developing creativity has been repeatedly underlined and EU strategic framework

for European cooperation clearly emphasises the importance of transversal key competences, including cultural awareness and creativity. Also the need to continuously improve its quality has also been underlined (ACESE 2009). Yet, the amount of music studies has been reduced substantially in primary teacher training. Still, teacher education has to guarantee primary school teachers the competence to teach music at basic education level (Juvonen & Anttila, 2003).

The task of teacher educators is to really encourage self-efficacy beliefs of pre service primary teachers in order to provide them with the best possible knowledge and skills to get involved with music teaching issues at primary school level.

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BIZNESA KOMPETENCES PILNVEIDE AUGSTSKOLĀS

Improvement of Business Competences at the Universities

Inese Spīča

Ernests Spīčs

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Abstract. *Taking into consideration at the present business environment of the Republic of Latvia, as well as its geographical position and the historical backgroung, it is important to make use of these conditions for further improvement business competences at the universities of Latvia. The object of the present research paper is business competences, the subject of the research paper is analyses of the business competences on the higher education establishments in Latvia. The objective of the research paper is to study the integration process of students and academic staff representing Latvian higher education establishments in formation of business competences in Latvia, to elucidate the factors influencing the business competences, to develop proposals for improvement of business competences in Latvia. Research methods: reported analysis of business competences, higher educations establishments in Latvia, study of correlation between business environment factors and business competences, economic and statistical analysis of the universities results, economic experiment, study of public and non - governmental institutions data in Latvia. The present paper includes further development of study on the contents of business competences, factors influencing it, higher education theory and policy.*

Keywords: *academic staff, business competences, business environment factors, higher educations establishments, improvement, students.*

Ievads
Introduction

Biznesa kompetenču pilnveide augstskolās ir aktuāls temats, jo, modernas tirgus ekonomikas apstākļos, katram darbaspējīgam cilvēkam ir pašam jārūpējas par savu iztikas līdzekļu iegūšanu, bet augstskolu beidzējiem jāspēj nopelnīt iztikas līdzekļus gan sev, gan arī saviem līdzstrādniekiem.

Ņemot vērā Latvijas uzņēmējdarbības vides attīstības tendences mūsdienās, kā arī Latvijas ģeogrāfisko izvietojumu un vēsturisko pieredzi, svarīgi ir izmantot to inovatīva studiju koncepta izstrādei, lai augstskolas absolvents būtu nodrošināts ar modernām biznesa kompetencēm.

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Pētījuma objekts ir biznesa kompetences. Pētījuma priekšmets ir biznesa kompetenču analīze Latvijas augstākajā izglītībā.

Darba mērķis izstrādāt biznesa kompetenču pilnveides virzienus Latvijas augstskolās. Darba mērķa sasniegšanai ir izvirzīti šādi darba uzdevumi: 1) izstrādāt biznesa kompetences jēdzienu; 2) izpētīt studentu un docētāju mijattiecības biznesa kompetenču veidošanā Latvijas augstskolās; 3) noskaidrot biznesa kompetences ietekmējošos uzņēmējdarbības vides faktorus.

Pētījuma metodes ir literatūras par kompetencēm referatīva analīze, Latvijas augstākās izglītības iestāžu darba rezultātu statistiskā un ekonomiskā analīze, studiju satura pašvērtējums, ekonomiskais eksperiments, Latvijas valdības un nevalstiskā sektora datu analīze par augstāko izglītību, nodarbinātību, darbaspēka tirgu un tam atbilstošām biznesa kompetencēm.

Pētījuma periods ir 1977. gads līdz 2018. gads, bet atsevišķi jautājumi ir pētīti īsākā laika periodā.

Biznesa kompetences
Business competences

Mūsdienās kompetences jēdziens tiek plaši lietots daudzās un dažādās jomās un kontekstos. Vēstures attīstības gaitā kompetences jēdziena skaidrojumi ir būtiski mainījušies. Piemēram, viduslaikos ar kompetenci apzīmēja pietiekamus ienākumus, lai kaut ko publisku uzturētu, bet mūsdienās ar to apzīmē nepieciešamās zināšanas, profesionālo pieredzi, izpratni kādā noteiktā jomā un prasmi to visu lietot darbībā (Purēns, 2017).

Kompetences jēdziena izpētei ir pievērsušies zinātnieki gan Latvijā, gan arī ārvalstīs. Kompetences jēdziens ir pētīts no juridiskā, no ekonomiskā, no pedagoģiskā, no psiholoģiskā, no vadībzinātnes, no valodniecības, no cilvēku resursu, no profesionālā un citiem aspektiem. Diemžēl biznesa kompetences jēdziena skaidrojumu zinātniskajā literatūrā autoriem neizdevās atrast.

Jauno speciālistu kompetences veidošanas problemātikai ir pievērsušies tādi zinātnieki un pētnieki kā D. Hymes, M. Canale un M. Swain, C. Bremer un K. Kohl, D. Schneckenberg un J. Wildt., D. S. Rychen un L. H. Salganik., F. Weinert, R. Nunn, I. Tiļļa, I. Maslo, E. Maslo, V. A. Bolotov, S. E. Shishov, A. M. Novikov, I. A. Zimnyaya, B. D. Elkonin B. D (Lobanova & Sunins, 2009), R. Garleja, T. Koķe un citi.

Ekonomikas un pedagoģijas zinātņu nozares eksperte, Latvijas Universitātes emeritētā profesore R. Garleja (2009) kompetenci skaidro kā subjekta izziņas vajadzību, personības attīstības veseluma procesuālu, integrējošu rādītāju, psiholoģisku, sociālu kvalitāti, kas nodrošina sekmīgu darbības veikšanu; kā kritēriju amata pienākumu izpildes kvalitātes novērtējumam. Savukārt zinātniskās institūcijas Biznesa kompetences centrs vadošais pētnieks A. Vedļa (2009) ar

kompetenci saprot zināšanu, prasmju, pieredzes un attiecību mijiedarbību gan jaunu, gan ierastu darbību realizācijā.

Tieši biznesa kompetencēm kā vienam no kompetences aspektiem jāpievērš daudz lielāka uzmanība Latvijas augstskolās, jo katram augstskolas beidzējam pašam būs jāspēj rast sava vieta darba tirgū, jāpelna sev iztiku. Autori ar biznesu saprot nodarbošanās veidu, kas nodrošina personu ar iztikas līdzekļiem. Savukārt biznesa kompetences jēdzienu autori skaidro, kā laikā un telpā mainīgu profesionālo kompetenču apvienojumu ar personas uzņēmību un lietpratību, kas nodrošina iztikas līdzekļu gūšanu mainīgā uzņēmējdarbības vidē. Tādējādi biznesa kompetences ir nepieciešamas, gan horeogrāfam, gan ekonomistam, gan uzņēmuma vadītājam, gan ikvienas profesijas pārstāvim.

Studentu un docētāju mijattiecības biznesa kompetenču veidošanā Latvijā
Improvement business competences on the integration process of students and academic staff in formation of business competences in Latvia

Pētījumu bāze studentu un docētāju mijattiecību izpētei biznesa kompetenču veidošanā Latvijas PSR laikā ir J. Vītola Latvijas Valsts konservatorija un ar Darba Sarkanā Karoga ordeni apbalvotā P. Stučkas Latvijas Valsts universitāte, bet atjaunotās Latvijas Republikas laikā - Latvijas Universitāte un Informācijas sistēmu menedžmenta augstskola. Iepriekš minēto augstākās izglītības iestāžu izvēle pētījumam saistīta ar to, ka autori tās ir absolvējuši, kā arī divi no autoriem ir bijuši docētāji divās no tām.

1. tab. **Biznesa kompetences vērtēšanas skala augstskolā**
Table 1 ***The Scale of Value of Business Competences at the University***

Vērtējuma punkti	Vērtējuma skaidrojums	Vērtējuma kritērijs: Studiju satura lietderība biznesā (%)
10	Izcila biznesa kompetence	100%
9	Teicama biznesa kompetence	90%
8	Ļoti laba biznesa kompetence	80%
7	Laba biznesa kompetence	70%
6	Gandrīz laba biznesa kompetence	60%
5	Viduvēja biznesa kompetence	50%
4	Gandrīz viduvēja biznesa kompetence	40%
3	Vāja biznesa kompetence	30%
2	Ļoti vāja biznesa kompetence	20%
1	Neapmierinoša biznesa kompetence	10%

Pētījuma gaitā autori veica katras augstskolas studiju satura pašvērtējumu no iegūto biznesa kompetenču viedokļa. Proti, piedāvātais studiju saturs tika izvērtēts pamatojoties uz tā lietderību un nozīmi autoru profesionālajā darbā. Šim

nolūkam tika izveidota studiju procesā iegūtās biznesa kompetences vērtēšanas skala, kur vērtējums 10 nozīmē izcilu biznesa kompetenci, bet vērtējums 1 neapmierinošu biznesa kompetenci. Augstskolā iegūtās biznesa kompetences vērtēšanas kritēriji un to skaidrojums apkopoti 1. tabulā.

Ņemot vērā 1. tabulā apkopotos biznesa kompetences vērtēšanas kritērijus un savu gandrīz 45 gadus ilgo profesionālā darba pieredzi kultūrizglītības jomā, otrais autors veica laikā no 1977. gada līdz 1981. gadam J. Vītola Latvijas Valsts konservatorijas Kultūras un mākslas zinātņu fakultātes Kultūrizglītības nodaļā horeogrāfijas specialitātē apgūtās programmas pašvērtējumu no iegūtās biznesa kompetences skatupunkta. 2. tabulā un turpmākajās tabulās apkopoti tie studiju kursi u.tml., kuru lietderību savā profesionālajā darbā autori novērtēja ar 10; 9; 8; 7; 6 punktiem, t.i., 60 % līdz 100 % no studiju satura lieti noderēja profesionālajā darbā. Savukārt pārējais studiju saturs, kurš tika novērtēts ar 1; 2; 3; 4; 5 punktiem nav iekļauts biznesa kompetences analīzes kopsavilkuma 2. tabulā un turpmākajās tabulās, jo pēc autoru pašvērtējuma tikai 50 % un mazāk no studiju satura lieti noderēja profesionālajā darbā, tāpēc tas atzīstams par nenozīmīgu biznesa kompetenču veidošanas kontekstā.

2. tab. **Biznesa kompetences veidošana horeogrāfijas studijās J. Vītola Latvijas Valsts konservatorijā laikā no 1977.gada līdz 1981.gadam**

Table 2 ***Formation of Business competences on the Choreography study process from 1977 till 1981 at the J.Vītola State Conservatory of Latvia***

Studiju saturs	**Punkti**
Latviešu dejas teorija un metodika; Runas kultūra; Kursa darbi: Scenārija meistarība; Kino-fotoamatierisma pamati; Valsts eksāmens specialitātē	10
Klasiskās dejas teorija un metodika; Baletmeistara māksla; Tēlotājas mākslas vēsture; Svešvaloda (franču valoda); Prakse: Diplomdarba prakse	9
Psiholoģija; Vēsturiskās sadzīves dejas teorija un metodika; Dueta deja; Marksistiski ļeņiniskā ētika; Mūzikas vēsture un literatūra; Skatuves mākslinieciskais noformējums; Kursa darbs: Pedagoģija	8
Pedagoģija; Krievu dejas teorija un metodika; Folklora; Skaņdarbu analīze; Skatuves tehnika	7
Sarīkojumu dejas teorija un metodika; Horeogrāfijas mākslas vēsture; Aizrobežu literatūras vēsture; Elementārā mūzikas teorija; Klavierspēle	6

No 2. tabulā apkopotā pašnovērtējuma var secināt, ka izcilas biznesa kompetences nodrošināja valsts eksāmens specialitātē, divi kursa darbi specialitātē un divi specialitātes studiju kursi. Proti, šis apgūtais studiju saturs 100 % bija noderīgs profesionālajā darbā. Kopumā visaugstākais vērtējums (8-10 punkti) profesionālajā darbībā nepieciešamās biznesa kompetences veidošanā ir kursiem, kurus vadīja tādas izcilas personības, kā etnohoreologs Harijs Sūna, baleta solists un pedagogs Juris Kaprālis, režisore Ināra Ņefedova, mākslas

zinātniece Aija Nodieva, psiholoģe Rita Bebre, fotomākslinieks Juris Krieviņš. Viņu vadītās lekcijas un praktiskās nodarbībās bija saturīgas un reizē radošas, bet personības šarms un harisma vēl tagad iedvesmo pašam darboties izvēlētajā dejas nozarē. Daži studiju kursi ir bijuši noderīgi praktisku iemeslu dēļ (6–7 punkti). Tādi ir svešvalodas, folkloras, ētikas un literatūras vēstures kursi. Nav noderīgi bijuši ar komunistisko ideoloģiju saistītie kursi – zinātniskais komunisms, materiālisms, PSKP vēsture u.c. Ja padomju periodā vēl bija iespējams šādas zināšanas izmantot, lai demagoģiskā veidā pārliecinātu diskusiju pretinieku, tad pēc 1990. gada šīm zināšanām vairs nav praktiskas nozīmes. Tādēļ vērtējums ir viszemākais – no 4 līdz 1 punktam.

Pirmais autors veica laikā no 1979. līdz 1983. gadam ar Darba Sarkanā Karoga ordeni apbalvotās P. Stučkas Latvijas Valsts universitātes Finansu un tirdzniecības fakultātes Tirdzniecības ekonomikas specialitātē apgūtās studiju programmas pašvērtējumu no iegūtas biznesa kompetences lietderības aspekta un rezultātus apkopoja 3. tabulā. Autora profesionālā darba pieredze ir gandrīz 45 gadi.

3. tab. **Biznesa kompetences veidošana Tirdzniecības ekonomikas studijās P. Stučkas Latvijas Valsts universitātē laikā no 1979.- 1983. gadam**
Table 3 ***Formation of Business Competences on the Trade Economic study process from 1979 till 1983 at the P.Stučka State University of Latvia***

Studiju saturs	**Punkti**
Svešvaloda (vācu valoda); Padomju tiesības un valsts tirdzniecības regulēšana; Tirdzniecības organzācija; Ekonomiskā analīze tirdzniecībā; Tirzniecības ekonomika; Pieprsījuma prognozēšana un tirzniecības konjunktūra; Tirdzniecības estētika; Ievads specialitātē; Kursa darbi: Ekonomiskā ģeogrāfija; Tirdzniecības organizācija un tehnika; Tirdzniecības ekonomika; Prakses: Ražošanas prakse tirdzniecības organizācijā; Ražošanas prakse tirdzniecības ekonomikā un plānošanā; Diplomdarbs:Mazumtirdzniecības preču krājumu loma PSRS pārtikas programmas īstenošanā	9
Ekonomiskā un tirdzniecības statistika; Grāmatvedības uzskaite tirdzniecībā; PSRS finanses un kredīts un tirdzniecības finanses; Tirdzniecības pārvalde	8
Vispārējā statistikas teorija; Tautsaimniecības plānošana; Pārtikas produktu prečzinība; Rūpniecības preču prečzinība; Darba aizsardzība	7
Tautsaimniecības nozaru ekonomika; Ekonomiski matemātiskās metodes tirdzniecībā; Tirdzniecības tehnika	6

No 3. tabulā apkopotās informācijas var secināt, ka biznesa kompetences veidošanā nozīmīgi bija specialitātes studiju kursi, ražošanas prakses, kursa darbu un diplomdarba izstrāde specialitātē. Par maznozīmīgiem biznesa kompetences veidošanā autors atzina ar komunistisko ideoloģiju saistītos studiju kursus un

tādus vispārizglītojošos studiju kursus, kā augstākā matemātika, varbūtības teorija, matemātiskā programmēšana, skaitļojamās mašīnas un fiziskā audzināšana, jo tie lieti nenoderēja ekonomista profesionālajā darbā. Līdzīgi kā iepriekš arī šeit augstāks biznesa kompetences vērtējums tika iegūts tajos studiju kursos, kurus vadīja izcili šīs jomas profesionāļi ar specialitātei atbilstošu zinātnisko grādu un zinātniskā darba pieredzi.

Pēc Latvijas neatkarības atjaunošanas pirmais autors izjuta nepieciešamību pilnveidot savas biznesa kompetences un uzsāka studijas Latvijas Universitātes Ekonomikas fakultātē Komerczinību maģistra studiju programmā. Šeit apgūtās biznesa kompetences apkopotas 4. tabulā.

4. tab. **Biznesa kompetences veidošana Komerczinību maģistra studijās Latvijas Universitātē laikā no 1993. līdz 1995. gadam**

Table 4 ***Formation of Business Competences on the Master of Commerce studies from 1993 till 1995 at the University of Latvia***

Studiju saturs	**Punkti**
Tautsaimniecības pedagoģija; Monetārā politika, teorija, prakse; Vācu valoda; Angļu valoda; Maģistra darbs: Tirdzniecības uzņēmumu eksporta un importa darījumu analīze Latvijas Republikā	10
Eksporta un importa darījumi; Komercuzņēmuma korporatīvā plānošana; Ārvalstu ekonomika; Izturēšanās psiholoģija un kultūra tirgus vidē; Nauda un bankas teorija; Investīcijas, politika un stratēģija uzņēmumos; Tirgus ekonomika un valsts; Maģistra gala pārbaudījumi: Mikroekonomika, Vācu valoda	9
Monopols un konkurence; Preču sortimenta politika, preču kvalimetrija; Nodokļu politika	8

Komerczinību maģistra studiju saturs vislielākajā mērā nodrošināja biznesa kompetences veidošanos, jo tikai 2 vispārējas ievirzes studiju kursi par prognozēšanu un kompjūtermodelēšanu tika novērtēti ar 4 - 5 punktiem. Visus studiju kursus vadīja mācībspēki ar nozarei atbilstošu zinātnisko grādu un praktiskā darba pieredzi komerczinībās. Taču neskatoties uz iepriekš minēto augsto biznesa kompetences rezultativitāti Komerczinību studiju programma netika akreditēta un drīzumā tika likvidēta.

Savukārt otrais autors jaunās tirgus ekonomikai atbilstošās zināšanas ieguva, studējot Latvijas Universitātes Ekonomikas un vadības fakultātē, Sabiedrības vadības maģistra studiju programmā. Šajās studijās iegūtās biznesa kompetences novērtētas 5. tabulā. Otrais autors secina, ka Latvijas Universitātes Sabiedrības vadības maģistra studijās apgūtais pārsvarā kalpojis vispārīgam prāta treniņam. Par īsti noderīgu uzskata iespēju maģistra darba izstrādes ietvaros veikt pētījumu tradicionālās kultūras nozarē, izmantojot apgūtās zināšanas ekonomikā un sabiedrības vadībā. Kopumā Sabiedrības vadības maģistra studijas biznesa

kompetences veidošanos ietekmēja netieši. Tai pašā laikā nevienu studiju kursu nevar uzskatīt par tik nederīgu, ka būtu jāliek zemāks vērtējums par 4.

5. tab. **Biznesa kompetences veidošana Sabiedrības vadības maģistra studijās Latvijas Universitātē laikā no 2000. līdz 2002. gadam**
Table 5 ***Formation of Business Competences on the Master of Public Administration studies from 2000 till 2002 at the University of Latvia***

Studiju saturs	**Punkti**
Sabiedrības vadības pamati; Maģistra darbs: Uzņēmējdarbības vides ietekme uz tradicionālo kultūru Latvijā	10
Sociāli ekonomiskā prognozēšana; Pārvaldība un ētika	8
Valsts pārvaldes un pašvaldību organizācija; Makroekonomika; Vadības teorija; Politikas analīze	7
Projektu vadīšana; Publiskās tiesības; Budžets un finanses	6

Trešais autors pilnu augstāko izglītību ieguva atjaunotās Latvijas Republikas laikā. Proti, bakalaura grāds Vadībzinātnē tika iegūts studējot Latvijas Universitātes Ekonomikas un vadības fakultātē. Trešā autora bakalura studijās iegūtā biznesa kompetence novērtēta 6. tabulā.

6. tab. **Biznesa kompetences veidošana Vadībzinību bakalura studijās Latvijas Universitātē no 2004. līdz 2009. gadam**
Table 6 ***Formation of Business Competences on the Bachelor of Management studies from 2004 till 2009 at the University of Latvia***

Studiju saturs	**Punkti**
Tirgvedība II; Bakalaura darbs: Valsts ieņēmumu dienesta klientu apkalpošanas problēmas un risinājumi	10
Tirgvedība I; Vadības socioloģija; Uzņēmuma stratēģijas un politikas vadīšana; Biznesa ētika; Kursadarbs vadības zinībās	9
Vadības psiholoģija; Patērētāju uzvedība; Starptautiskā tirgvedība; Uzņēmējdarbības vide I; Uzņēmējdarbības vide II	8
Grāmatvedības teorija; Ievads tiesību zinātnē; Saimnieciskās tiesības; Finanšu grāmatvedība; Kvalitātes vadīšanas sistēmas; Kvalitātes novērtēšana	7
Angļu valoda I; Angļu valoda II; Vadības teorija; Starptautiskās ekonomiskās attiecības; Personālvadība; Tirgvedības pētīšana; Tirgvedības komunikācija; Starptautiskā tirdzniecība un finanses I; Starptautiskā tirdzniecība un finanses II	6

Trešais autors pēc biznesa kompetences analīzes rezumē, ka vislietderīgākie biznesa kompetences veidošanā bija specialitātes studiju kursi, piemēram, tirgvedība, vadības socioloģija un psiholoģija, uzņēmuma stratēģijas un politikas vadīšana, uzņēmējdarbības vide, grāmatvedība u.tml. Noderīgākais studiju laika ieguvums ir veiktais pētījums bakalaura darba izstrādes gaitā par Valsts

ieņēmumu dienesta klientu apkalpošanas problēmām un risinājumiem. To izstrādājot varēja secināt, cik daudz dažādu problēmu ir klientu apkalpošanā un rast to risinājumus, liekot lietā studiju procesā iegūtās biznesa kompetences. Savukārt par maznozīmīgiem studiju kursiem biznesa kompetences veidošanā tika atzīti 12 studiju kursi no kopējā 43 studiju kursu kopskaita, t.i., 28 % jeb 1/3 no studiju satura. Tie pamatā bija vispārizglītojošie studiju kursi, kurus vadīja docētāji bez praktiskā darba pieredzes uzņēmējdarbībā. Trešais autors uzreiz pēc bakalaura grāda iegūšanas turpināja studijas Informācijas sistēmu menedžmenta augstskolā profesionāla maģistra studiju programmā Uzņēmējdarbības vadība. Šeit iegūtās biznesa kompetences apkopotas 7. tabulā.

7. tab. **Biznesa kompetences veidošana Uzņēmējdarbības vadības profesionālā maģistra studijās Informācijas Sistēmu menedžmenta augstskolā laikā no 2009. līdz 2011. gadam**
Table 7 ***Formation of Business Competences on the Master of Business Administration studies from 2009 till 2011 at the Applied University of Information Systems Management***

Studiju saturs	**Punkti**
Stratēģiskā menedžmenta koncepcijas; Uzņēmējdarbības tiesiskā regulēšana un Eiropas tiesības; Vadības ekonomika; Vadības psiholoģija un pedagoģija; Maģistra darbs: Klientu apkalpošanas pilnveide Valsts ieņēmumu dienestā	10
Finanšu menedžments, investīcijas un banku darbība; Firmas konkurētspēja; Informācijas sistēmas vadītājiem; Inovatīvā darbība; Kvalitātes pārvaldība; Starptautiskais mārketings un menedžments	9
Projekta vadīšanas tehnoloģijas; Pirmsdiploma prakse uzņēmējdarbībā	8
Cilvēcisko resursu menedžments; Finanšu uzskaites sistēmas; Pētniecības metodes un disertācijas darbs; Risku menedžments	7

Tieši maģistratūrā iegūtās biznesa kompetences trešais autors min kā noderīgākās profesionālajā darbībā, jo no 18 studiju kursu kopskaita tikai viens studiju kurss par loģistiku tika novērtēts ar 5, t.i., tikai 50 % no šī kursa satura autors atzina par derīgu profesionālajā darbībā. Šādu biznesa kompetences rezultativitāti, absolvējot iepriekš minēto programmu, autors skaidro ar to, ka lielākā daļa studiju kursu docētāju bija ar profesionālā darba pieredzi uzņēmējdarbībā, docējamajam studiju kursam atbilstošu zinātnisko grādu un zinātniski pētnieciskā darba pieredzi docējamajā jomā. Papildu tam jāsecina, ka 94 % no studiju satura autors atzina kā lietderīgu biznesa kompetences veidošanā. Trešā autora praktiskā darba pieredze ir visīsākā 13 gadi.

Apkopojot iepriekš veikto 3 autoru pašvērtējumu rezultātus par biznesa kompetences veidošanos, studējot 3 Latvijas augstskolu 6 studiju programmās, var pamanīt 2 sakarības: 1)jo lielāks ir specialitātes studiju kursu īpatsvars studiju programmas saturā, jo augstāki ir studijās iegūto biznesa kompetenču vērtējumi;

2) jo augstākas ir specialitātes studiju kursu docētāju biznesa kompetences, jo augstāks ir studijās iegūtās biznesa kompetences vērtējums. Papildu tam jāatzīmē, ka visi autori, kā nozīmīgu ieguldījumu biznesa kompetences veidošanā norādīja studiju gala darba, kā arī kursa darbu, pētniecības darbu izstrādi ar specialitāti saistītajā jomā. Tādējādi tieši studenta un docētāja kopdarbība zinātniski pētnieciskajā jomā un šādi gūtā pieredze intelektuālā kapitāla veidošanā studiju procesā ir nozīmīgs biznesa kompetences veidošanas rīks.

Biznesa kompetences pilnveide augstskolā un to ietekmējošie faktori
Improvement of Business Competences at the University and its influencing Factors

Latvijā augstskolu skaits laika periodā no 1980.-2016. gadam palielinājies no 10 augstskolām līdz 32 augstskolām. Papildu tam laikā no 2000.-2016. gadam radās 26 koledžas. Tādējādi 2016./2017. akadēmiskajā gadā darbojās 56 augstākās izglītības iestādes un 2 ārvalstu augstskolu filiāles, studējošo kopskaits bija 82914 studenti. Latvijā 2016. gadā akadēmiskais personāls pamatdarbā sastādīja 4620 darbiniekus, no tiem profesori bija 661, tas nozīmē, ka pēc autoru aprēķina, uz 1 profesoru vidēji bija 125 studenti. Bez tam studentu sadalījums uz 1 profesoru bija stipri atšķirīgs dažādās augstskolās. Kopumā 2016. gadā augstākās izglītības iestādēs pamatdarbā strādāja 5206 darbinieki, bet zinātniskais grāds bija 59 % no tiem. (LR Izglītības un zinātnes ministrija, 2017).

Lai novērtētu augstāko izglītību mūsdienās ieguvušo absolventu biznesa kompetenču lietderību profesionālajā darbā kopumā, autori izpētīja 2016. gada Latvijas nodarbinātības statistiku un konstatēja, ka iedzīvotāju ar augstāko izglītību nodarbinātības līmenis vecumā no 15-64 gadiem sastāda 87 % no visa augstāko izglītību ieguvušo iedzīvotāju kopskaita attiecīgajā vecumā. Tas ir daudz augstāks nekā kopējais Latvijas iedzīvotāju nodarbinātības rādītājs 69 % (Eurostat, 2017). Bez tam šāda nodarbinātības tendence novērojama jau pēdējos 10 gadus. Tādējādi autori secina, ka augstskolās iegūtās biznesa kompetences kopumā ir noderīgas profesionālajā darbībā, jo augstskolu absolventu nodarbinātības līmenis ir augstāks nekā Latvijā kopumā. Lai augstskolu absolventu biznesa kompetences būtu modernas un pieprasītas tirgū, viņiem profesionālās kompetences jāpilnveido dažādos Eiropas kompetences centros, bet inovatīvas biznesa kompetences jāapgūst dažādās Eiropas augstākās izglītības iestādēs mūžizglītības programmu ietvaros (Hallier, 2012). Autori veica literatūras referatīvu analīzi par augstskolu darba rezultativitāti ietekmējošiem faktoriem un noskaidroja, ka docētāji ar zinātnisko grādu ir visefektīvākie augstskolas intelektuālā kapitāla veidošanā, bet studentu iesaiste intelektuālā kapitāla veidošanā ir nepietiekama (Spica u.c., 2017); augstskolas studentu kompetenci būtiski ietekmē docētāju kompetence (Sultanova u.c., 2017). Pēc

teorētisko atziņu un autoru Latvijas augstskolās iegūtās biznesa kompetences pašvērtējumu izpētes ir izstrādāti šādi priekšlikumi: 1) studiju programmu saturā jāpalielina specialitātes studiju kursu īpatsvars vismaz līdz 90 % no kopapjoma; 2) specialitātes studiju kursu docētājiem jābūt ar augstu biznesa kompetenci specialitātē, vēlams ar specialitātei atbilstošu zinātnisko grādu, ar zinātniski pētnieciskā darba pieredzi specialitātē; 3) docētājiem jāizstrādā inovatīva biznesa kompetences veidojoša studiju metodika.

Secinājumi
Conclusion

Izpētot biznesa kompetences veidošanos augstskolā autori secina, ka biznesa kompetences līmeni ietekmē studiju programmas saturs, docētāja biznesa kompetences un metodika. Savukārt studenta biznesa kompetences apguves rezultativitāti augstskolā ietekmē studenta iesaistes dziļums studijās, docētāja profesionālā veiktspēja, studenta un docētāja kopdarbība studiju procesā. Ņemot vērā iepriekš minēto autori izstrādāja galvenos biznesa kompetences pilnveides virzienus augstskolā. Proti, no studiju programmām jāizslēdz vispārizglītojošie studiju kursi, bet jāpaplašina profesionālo kompetenci veidojošo specialitātes studiju kursu īpatsvars; studiju metodikai jābūt daudzveidīgai, inovatīvai un modernā darba vidē balstītai; tai jānodrošina studenta un docētāja kopdarbība intelektuālā kapitāla veidošanā; docētājam jābūt ar ilgstošu profesionālā darba pieredzi docējamajā studiju kursā, ar pētnieciskā un zinātniskā darba pieredzi, ar zinātnisko un/vai profesionālo grādu docējamajā jomā.

Summary

The objective of the paper is to study the formation process of business competences at the universities in Latvia, to elucidate the factors influencing it, to develop directions for improvement of business competences at the universities in Latvia. Research methods are theoretical study methods and empirical pilot methods. Research basis are the higher education establishments in Latvia: J. Vītola State Conservatory of Latvia, P. Stučka State University of Latvia, University of Latvia, Applied University of Information Sistems Management; The main characteristics of higher education establishments; Original self actualization data about the formation of business competences on study at the universities in Latvia. The research period is from 1977 till 2018, separate themes have been studied for shorter period of time or by way of comparison. The theoretical and practical importance of the research: this is the first research on the analysis of factors influencing the formation of business competences at the universities in Latvia; Main aspects of formation of business competences in Latvia have been evaluated; Authors identified the business competences problems at the universities in Latvia and proposed problem solutions.

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PREVIOUS EXPERIENCE OF UNIVERSITY STUDENTS IN PHYSICAL EDUCATION AT HIGH SCHOOL

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Abstract. *Students in Latvia have a moderately positive attitude towards organized physical activity at the university, it has been formed in the past and is related to the previous experience in physical education gained at school. To promote student involvement in physical activities and changes in students' attitude towards physical activity at the university, it is necessary to evaluate their previous experience in physical education acquired at school. The aim of the study is to evaluate of the psychometric properties of the Youth Experiences Survey for Sport (YES-S) (MacDonald et.al., 2012) for students of Latvia. Research methods: The Youth Experiences Survey for Sport (YES-S), Principal component factor analysis. Respondents: 265 students aged from 19 to 24 from four universities of Latvia. Some contradictions were identified between the theoretical basis of the YES-S instrument's scale and the various criteria that can characterize experience in physical education. As a result, a five-factor structure was developed, which includes 19 items. The factor loads of the other 18 items indicated that these items were not compatible with the theoretical concept of the YES-S.*
Keywords: *physical education, previous experience in sport, university students.*

Introduction

In Latvia, there is a moderately positive attitude towards compulsory sport activity at the university (Koroļova, 2010; Vecenāne & Fernāte, 2012; Šišlova & Fernāte, 2016). In Planned Behaviour Theory (PBT), an attitude towards a particular activity is a specific action (Ajzen, 1991). For students in Latvia, the activity in attending physical activities at the university is not unambiguous: organized physical activities, if they are not compulsory, are attended by only 36% of students (Koroļova, 2010), in order not to attend the compulsory sport activities, 13% of students submit medical certificates, where the exemption from sport is not justified; moreover, it has been determined that this action comes from school and these students mostly had a negative attitude towards physical education at school (Šišlova & Fernāte, 2017). Differences in the attitudes of students towards physical education may be attributed to the previous experience

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in physical education (Subramaniama & Silverman, 2007). Certain correlation has been determined between attitude towards physical education at high school and at university (Шишлова & Дунай, 2017). Thus, the attitude towards physical activities at the university is formed in the past and is related to the experience gained in physical education at school. To improve students' attitude towards physical activity at the university, it is necessary to evaluate their experience in physical education at school. The aim of the study is to evaluate of the psychometric properties of the Youth Experiences Survey for Sport (YES-S) (MacDonald et.al., 2012) for students of Latvia. Method: participants were 265 students aged from 19 to 24 from four universities of Latvia who completed the Youth Experiences Scale (YES-S), Principal component factor analysis was carried out.

Theoretical review

The YES-S is a five-factor experience measure specifically designed for the sport context. The 37 items of the YES-S instrument were divided into five scales. Four scales measure the positive developing experience, while one scale measures the negative experience (MacDonald et al., 2012). MacDonald and co-authors (2012) believe that the positive and negative results of participation depend on many factors. After examining several researches, it was concluded that if the sport environment is not created carefully, participants may experience both positive and negative results; thus, the scale of the instrument is based on a series of positive and negative influencing results, which are related to participation in organized sports (MacDonald et al., 2012). The concepts of the scales are outlined below.

One of the more spacious scales – "Personal & Social skills" – includes 14 items. Based on various researches, MacDonald and co-authors (2012) believe that the experience gained in organized sport activity may be applicable in other aspects of life. For example, team work in a work environment that requires good communication skills, cooperation, as well as knowledge how to help others and compromise. The scale includes items that are related to personality developing moments, which can be gained by youth through sport – knowledge of leadership and of the influence of an individual's emotions and attitudes, as well as giving and taking of feedback (MacDonald et al., 2012).

The scale "Cognitive skills" includes 5 items, which are not directly related to the development of physical skills and abilities; however, MacDonald and co-authors (2012) based on researches, that it is possible to develop both cognitive and creative skills in a sport environment, as well as that engaging in sport

increases academic performance and the desire to stay in school (Dwyer et al., 2001; Eccles & Barber, 1999).

The scale "Goals setting" includes four items. According on the fact that athletes often set specific goals in the field of sport (Burton & Weiss, 2008), the authors of the YES-S instrument believe that the scale "Goals setting" may be useful for evaluating various programs in sport, assessing the items of the scale to determine behavioural changes. Moreover, coaches interested in goal setting in a sport may use this construction to determine an athlete's progress or development (MacDonald et al., 2012).

The four items of the scale "Initiative" are based on Larson's (2000) concept that structured voluntarily activity is most suitable for the development of initiative, for instance, sport, art, or other activities, where youth tends to combine motivated activity with focused attention. The authors of the YES-S instrument emphasize that high evaluations of all four items of the scale "Initiative" mean constructive initiative (MacDonald et al., 2012).

The scale "Negative experience" includes ten items. By reviewing sources of literature, the authors of the instrument conclude that engaging in sport can have a negative impact on physical health and well-being, as well as psychological, emotional, and social development, which corresponds with the concept presented by Fraser-Thomas and co-authors (2005) on the possibility of negative impact in sport on three levels. The proposed items of the scale for negative experience indicate the flexibility of the scale to cover several age groups (MacDonald et al., 2012).

Do all the mentioned items characterize experience in physical education? Are there no theoretical contradictions in the proposed scales?

No contradictions were found in the scale "Personal & Social skills". Several criteria of the scale were marked as positive experience in sport – peer interactions, new social contacts, friendship, support from adolescents, support from the family (Alender et al., 2006; Strean, 2009). It is a well-known fact that feedback has a very significant impact on a student's learning achievements (Hattie, 2009).

Some contradictions can be observed in the scale "Cognitive skills", which assesses the improvement of computer/internet skills, acquisition of information, academic, and creative skills through engaging in sport. Physical activity improves academic skills (Hoseinzadeh & Shoghi, 2013). However, these items may raise questions of how they are related to experience in sport or physical education, because "Physical activity, physical education and school sport are similar in that they all include physical movement…" (Health position paper, 2015). The mentioned skills can be considered as benefits obtained through participation in sport or physical education; however, benefits of sport activities may also include such criteria as improvement of physical fitness, strengthening

of health, development of new skills and improvement of the previously acquired skills, and others which are related to students' attitude towards compulsory physical activity at the university (Šišlova & Fernāte, 2015).

At the same time, the item "Improved athletic or physical skills" was included in the scale "Initiative". However, the modified construction of the YES 2 instrument for assessing youth's experience in any structured activity, which is the basis of YES-S, this item relates to the scale "Cognitive skills" (Hansen & Larson, 2005).

The scale "Goals setting" did not cause many contradictions. Setting personal goals increases the motivation to participate in physical activities (Flintoff & Scraton, 2001; 2012; Lewis, 2014). Traditionally, it was considered that all activities are given meaning, direction, and purpose, and that the quality and intensity of behaviour will change as these goals change (Covington, 2000).

Some contradictions can be observed in the scale "Negative experience". In the world, research on experience in physical education revealed causes related to experienced emotions that influence a person's participation or non-participation in physical activity. The negative influencing factors were peer pressure; low support from teachers; dominance of the best students; team selection based on skills and abilities, which humiliates; aggressive behaviour supported by coaches and teachers; teachers' verbal abuse; mocking; unfairness of both adults and peers in sports games; exclusion; low skills; feeling of failure; being afraid; focusing attention on competitions, wins, the best team, but not on youth education and health; an assessment system based on physical performance, which forces less-skilled students to do something they may not do, even threatening them with a bad mark (Flintoff & Scraton, 2001; Allender et al., 2006; Brooks & Magnusson, 2006; Strean, 2009, Beltrán-Carrillo et al., 2012, Cardinal et al., 2013). Several of these criteria are items of the classroom climate, which is created by teachers (Lewis, 2014). In Latvia, students do not want to attend sport activities mainly due to having to pass the norm, even though the standard of physical education does not provide for this. Students are also dissatisfied with evaluation, difficult tasks, teachers' attitude towards „losers", boring and repetitive classes, insufficient skills (Rubana & Ābele, 2008). Although several items of the proposed scale are similar with the mentioned criteria, items related to adult behaviour that do not fit youth's beliefs on morality or their own immoral behaviour, or the use of alcohol or drugs causes doubts as to whether or not they are necessary for the determination of students' experience in physical education.

Material and methods

The pilot research involved 265 students aged from 18 to 24 (21.5±2.1) from four universities of Latvia: Riga Technical University (RTU), University of Latvia (UL), Jāzeps Vītols Latvian Academy of Music (JVLAM) and Latvia University of Agriculture (LUA) (Table 1).

Table 1 **Selection of University Students of Latvia**

	RTU	**UL**	**JVLAM**	**LUA**	∑
	132	88	21	24	265
Men	72	49	13		134
Women	60	39	8	24	131

The students voluntarily and anonymously participated in a The Youth Experiences Survey for Sport. The stage of high school was chosen so that the events in physical education in the past would be closer to the present, although the physical education and sport environment provides an opportunity for the creation of long-term memory, especially if the memory about them is a bad one (Cardinal et al., 2013).

In the questionnaire, the YES-S instrument was proposed for evaluation, which consists of 37 items, which are divided into five scales. Four scales assess the positive developing experience*:* "Personal & social skills", "Cognitive skills", "Goals setting", "Initiative", - a total of 27 items, but one scale assess the "Negative experience" – 10 items. At the RTU language centre the statements were translated from English into Latvian and back into the original language. A 4-point Likert scale was adopted for the evaluation of the items of the YES-S instrument, where 1 – completely disagree, 2 - disagree, 3 – agree, 4 – completely agree (MacDonald et al., 2012).

Descriptive mathematical statistics was applied – arithmetic mean, standard deviation, as well as principal component analysis (PCA), where the distributed factors can explain the whole dispersion – common and specific, was applied for the result processing, as well as Varimax rotation method with Kaiser normalization. The reliability of the scale was evaluated according to the Cronbah's alpha indicator: $\alpha>0.9$ – Very good, $\alpha>0.8$ - Good, $\alpha>0.7$ - Acceptable, $\alpha>0.6$ - Questionable, $\alpha>0.5$ - Bad, and $\alpha<0.5$ - Unacceptable (George and Mallery, 2003, p. 231). Criterion of statistical reliability $p<0.05$. The results were processed using the Statistical Package for the Social Sciences (SPSS) version 23.0.

Results

37 items were tested to determine the factor structure, determining 5 factors for analysis according to the YES-S instrument (MacDonald et al., 2012). The Kaiser-Meyer-Olkin (KMO) indicator of sampling adequacy was 0.839. The indicator of the Bartlett's sphericity test (BST) was significant, $\chi 2=6195.397$, $p<0,0001$. These results indicated that the sample size was sufficient in relation to the number of items of the YES-S, as well as that the correlations between the items significantly differed from zero and the items was suitable for factor distribution. Scree plot indicated that a 5-factor structure may be applicable for this analysis. The obtained five factors explained 55.19% of the dispersion data. The Cronbach's alpha indicators of internal consistency of the factors are shown in Table 2.

Table 2 **Internal consistency (Cronbach Alfa) of the facors**

Factor 1	**Factor 2**	**Factor 3**	**Factor 4**	**Factor 5**
13 items	11 items	6 items	4 items	3 items
0.908	0.918	0.804	0.422	0.579

The internal consistency for the first three factor's scales was acceptable, but for the 4th and the 5th factor's scale – unacceptable (George and Mallery, 2003, p. 231). Only factors 2 and 3 were successfully interpreted in the obtained structure, where items were combined according to the YES-S scales "Personal & Social skills" and "Negative experience". Interpretation of factors 2, 4 and 5 was difficult. Consequently, item loading analysis was carried out based on two main criteria – the size of the item loading and cross-loading, as well as the conceptual coherence of the items with the factors that they load in terms of factor interpretation (Costello & Osborne, 2005). The minimal item loading of 0.319 was calculated by the formula: FL min= 5.152/[SQRT(N-2)] (Norman & Streiner, 1994, p. 139).

Thus, items with a loading below 0.319 and items with cross-loading in other factors above 0.319, as well as items that make factor interpretation difficult were removed. Thus, 17 items were removed from the questionnaire. There was left one criteria with cross loads above 0.319 in the structure, because it is well suitable for the scale concept. The remaining 20 items created a well-interpretable 5-factor structure (Table 3). Scree plot indicated that a 5-factor structure may be appropriate for this analysis.

Table 3 **Factor loadings of items**

		1.	**2.**	**3.**	**4.**	**5.**
1.	Made a new friend	0.811				
2.	Learned I had a lot in common with people from different backgrounds	0.795				
3.	Got to know people in the community	0.786				
4.	Learned to be patient with other group members	0.784				
5.	Learned about helping others	0.742				
6.	Learned that is not necessary to like people in order to work with them	0.726				
7.	There were cliques in this activity		0.814			
8.	Other youth in this activity made inappropriate sexual comments, jokes, or gestures		0.798			
9.	Adult leaders made personal comments that made me mad		0.738			
10.	Was treated differently because of my gender, race, ethnicity, disability, or sexual orientation		0.650			
11.	Adult leaders encouraged me to do something I believed morally wrong		0.619			
12.	This activity has stressed me out		0.568			
13.	Learned to consider challenges when making future plans			0.886		
14.	Observed how others solved problems and learned from them			0.814		
15.	I set goals for myself in this activity			0.787		
16.	Learned to find ways to reach my goals	0.348		0.751		
17.	I became better at giving feedback				0.927	
18	I became better at taking feedback				0.908	
19.	I put all my energy into this activity					0.783
	Learned to push myself					0.778
	α	0.892	0.804	0.886	0.778	0.856
	Standartized items α	0.892	0.808	0.885	0.783	0.858
	Mean	13.29	12.64	9.31	4.51	5.43
	SD	4.23	4.06	3.13	1.47	1.57
	F	44.38	104.34	78.13	12.42	12.10
	p	0.000	0.000	0.000	0.001	0,001
	Grand Mean	2.23	2.11	2.33	2.25	2.72

The KMO indicator of sampling adequacy was 0.793. The indicator of BTS was significant, $\chi 2=2993.249$, $p<0,0001$. The obtained 5 factors explained 69.55% of the dispersion data. The item loadings were sufficiently high, which indicated that the created scales are related to the YES-S scales and they have the same theoretical basis. The Cronbach's alpha indicators of internal consistency of all scales was good and acceptable (Table 3).

The means of the items are reflected graphically. The item numbers correspond to the item numbers from Table 3 (Figure 1).

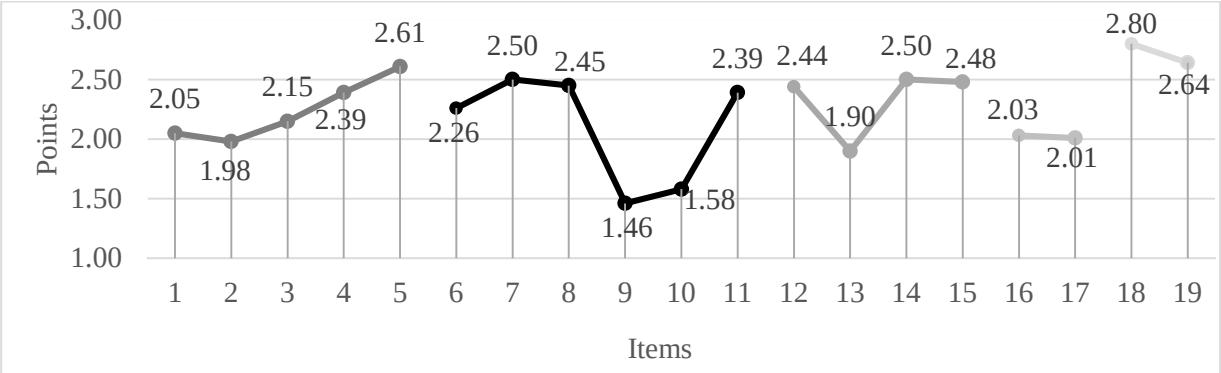

Figure 1. **Average results of item evaluation on a 4-point scale**

As it can be observed, the evaluations of the 4 items of factor "Negative experience" were assessed sufficiently high in comparison to several items from the four positive experience scales (Fig.1).

The created structure differed from the proposed YES-S structure (Fig.2).

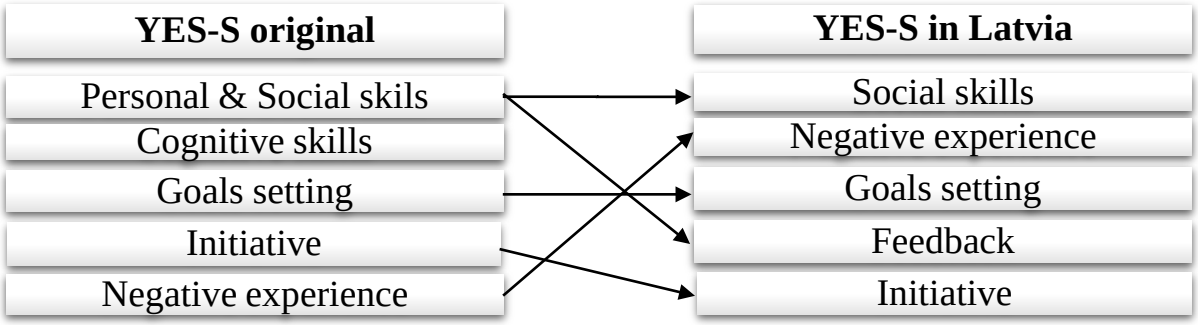

Figure 2. **Structures of factors**

It was not included the factor "Cognitive skills", as well as the obtained factors split MacDonald's and co-authors (2012) concept of personal and social skills. According to the results, 2 factors were obtained called "Social skills" and "Feedback". The factors "Negative experience", "Goals setting" and "Initiative" were obtained similarly to the YES-S factor structure.

Discussion

The experience of students in Latvia in physical education was evaluated, using the YES-S. As a result, a 5-factor structure was created with reliable scales, which included 20 items that had the same theoretical basis of the mentioned instrument. However, in the new structure were not included 17 items, whose factor loading indicated the inadequacy of these items to the theoretical concept of the YES-S instrument.

The created structure was not included the factor "Cognitive skills". The 5 items of the YES-S scale "Cognitive skills" are not directly related to the development of physical skills and abilities (e. g. computer/internet and creative skills, the desire to stay in school). The phenomenon of the results showed that students in Latvia were not associated the mentioned skills with physical education, or do not considered them as essential skills that are formed in sport activities. Although, a sport environment provides an opportunity to develop both cognitive and creative skills, as well as that engaging in sport increases academic performance and the desire to stay in school (Dwyer et al., 2001; Eccles & Barber, 1999), and also, improves academic achievements (Hoseinzadeh & Shoghi, 2013). Meanwhile, the benefits of sport activity can include improvement of physical fitness, strengthening of health, development of new skills and other, which is related to the students' attitude towards compulsory physical activity at the university (Šišlova & Fernāte, 2015). So, the question of whether the scale "Cognitive skills" evaluates the experience of students in Latvia in physical education remained questionable.

At the same time, the item "Improvement of athletic or physical skills" was removed from the new structure's scale "Initiative", which suggested that students in Latvia were not regarded the mentioned item as an item of initiative. In the primary factor structure this item with cross-loading was combined in the first factor with items that, according to MacDonald's and co-authors (2012) concept, characterise personal and social skills. According Hansen & Larson (2005) concept this item relates to the scale "Cognitive skills".

Similarly, an item related to focusing attention was removed from the scale "Initiative"; however, this item is one of the key items in Larson's (2000) concept of initiative development. Thus, the initiative of students in Latvia is characterized by only two items (Table 3), which were assessed the highest. The average result of scale evaluation is the highest for the scales of positive experience – 2.72±0.79, but, according to the concept of the YES-S, high evaluations of all 4 items are significant, which means constructive initiative (MacDonald et al., 2012). This scale also requires more research.

Following the results, 2 separate factors were obtained, which were called "Social skills" according to MacDonald's concept and "Feedback". We believe

that it is good that the items related to feedback were divided into a separate factor. Noting the importance of feedback in improving achievements, Professor John Hattie (2009) emphasizes that the feedback to the teacher about what the student is able and is not able to do is very important. It is essential to ensure that mistakes are welcomed, because they have an important role in improving learning. However, students in Latvia rated item "I became better at giving feedback" during physical education as one of the lowest – 2.31±0.75. The factor "Social skills" consists of only 6 items. 8 items were removed, considering item loading and the possibility of factor interpretation. Thus, the evaluation provided by students in Latvia for the items of the scale "Personal & Social skills" only partially correspond to MacDonald's and co-authors (2012) concept.

The obtained factor "Goals setting" was similar with the YES-S instrument, including all 4 items. Athletes often set special goals in the field of sports (Burton & Weiss, 2008). Setting personal goals increases the motivation to participate in physical activity (Flintoff & Scraton, 2001; Lewis, 2014). Traditionally, it was considered that all activities are given meaning, direction, and purpose, and that the quality and intensity of behaviour will change as these goals change (Covington, 2000).

The factor "Negative experience" combined 6 of the 10 proposed items. The highest rated items were related with sayings by peers and adults. The verbal abuse from teachers, as well as the aggressive behaviour of peers, which may lead to various expressions and gestures, are the negative experience in sport environment (Brooks & Magnusson, 2006; Beltrán-Carrillo et al., 2012); however, there is a lot more negative experience in physical education (Flintoff & Scraton, 2001; Allender et al., 2006; Brooks & Magnusson, 2006; Rubana & Ābele, 2008; Strean, 2009, Beltrán-Carrillo et al., 2012, Cardinal et al., 2013). Although many criteria of negative experience were not offered for evaluation, the average result of negative experience exceeds 2 points on a 4-point scale – 2.11±0.67. The negative attitude towards physical education at school is reflected by often exemptions from sport activities at school in Latvia. (Šišlova & Fernāte, 2017).

Conclusion

In conclusion, a five-factor structure was developed, which includes 20 items. The factor loads of the other 17 items indicated that these items were not compatible with the theoretical concept of the YES-S. The created structure differed from the proposed YES-S structure. It was not included the factor "Cognitive skills", as well as the obtained factors split MacDonald's and co-authors (2012) concept of personal and social skills - 2 factors were obtained

called “Social skills” and “Feedback”. The factors “Negative experience”, “Goals setting” and “Initiative” were obtained similarly to the YES-S factor structure.

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THE USAGE OF DIGITAL RESOURCES IN TEACHING AND RESEARCHING (ON THE EXAMPLE OF THE UNIVERSITY PROJECTS)

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Abstract. *The 21st century shifted the world communities to an "electronic" stage of evolution. Drastic changes can be visualized in literature, linguistics and other humanitarian sciences. The greatest attention is paid to the promotion of linguistic researches, which are oriented towards electronic documenting of the language as well as on the intensive usage of digital methodologies and modern technologies. The reliance on these "technics" enables contemporary Georgian scientists to achieve principally new results and verify different models or hypotheses. Despite these circumstances, a lot must be done in the sphere of Kartvelology. The paper presents the university projects, which are oriented towards:*

- *involvement of students in researching activities dealing with the corpus-building;*
- *promotion of the development of digital Kartvelology;*
- *facilitation of creation of Georgian and foreign scholars' digital library and text-corpus;*
- *development of Georgian scientific meta-language, etc.*

Therefore, promotion of digitalization, development of scientific meta-language, facilitation of the preservation of well-known scholars' works, creation of digital libraries and establishment of modern methods crucial for the promotion of up-to-date teaching processes – these are the main issues of our paper and integral problems of today's educational world. The methodology of research includes observation, analysis and evaluation of ongoing projects and their already-achieved/future outcomes. Certain prospects are visualised.
Keywords: *corpus-building, digitalization, documenting, Kartvelology, meta-language, text.*

Introduction

The 21st century can be nominated as the era of digitalization and computer-aided transformations - the transformations, which are presented in every sphere of life. Drastic changes are visualized in literature, linguistics and other humanitarian sciences. One of the best outcomes of the technological transformation of humanities is the development of researches oriented towards the creation of corpus linguistics, which "has undergone a remarkable renaissance

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in recent years. From being a marginalised approach used largely in English linguistics, and more specifically in studies of English grammar, corpus linguistics has started to widen its scope" (McEnery & Wilson, 2005).

It can be definitely stated that in the 21st century "computer technology has revolutionised the fields of linguistic research (descriptive linguistics) and applied linguistics (language teaching and learning) with the advent of corpus linguistics" (Kamariah, 2017). Many scholars believe that corpora is an increasingly popular field, "which involves the analysis of (usually) very large collections of electronically stored texts, aided by computer software. The word *corpus* is Latin for *body* – a corpus is therefore a 'body' of texts" (Baker, 2010). "The texts (spoken or written production of language) are assembled to form a large collection of authentic texts called a corpus (plural-corpora) which comes in various sizes" (Kamariah, 2017).

An outstanding importance of corpus linguistics is vividly seen during its involvement in teaching and researching processes, especially, in such areas as historical linguistics, diachronic studies, language acquisition (*classroom concordancing* or *data-driven learning* (Johns, 1991)), lexicography, etc. Nowadays, the majority of progressive researches are oriented towards the usage of digital resources. It has already been mentioned that computer-aided studies are especially popular in linguistics, because it deals with a wide spectrum of an empiric material. An electronic documenting of the language as well as the intensive usage of modern technologies outline new perspectives of researching via facilitating the reinterpretation of certain theories and verification of already-existed results, which serve as a prerequisite of the development of any branch of the science.

The given paper presents the innovative university projects, which are oriented towards:

- the involvement of students in researching activities dealing with the corpus-building;
- the promotion of the development of digital Kartvelology;
- the facilitation of the creation of well-known Georgian and foreign scholars' digital library and text-corpus;
- the development of Georgian scientific meta-language;
- the involvement of digital resources in the process of teaching, etc.

The methodology of the research includes observation, analysis and evaluation of the ongoing projects and their already-achieved/future outcomes. Certain prospects are visualised and assessed. The implementation of these projects will facilitate the rearing of digitally-skilled and research-oriented future generations.

Therefore, they can serve as exemplary models for those universities of post-soviet countries, which strive to implement innovative student-oriented and digitally-enriched strategies of teaching, researching and investigating.

From the history of the development of corpus-based researches in Georgia

The end of the 20th century became a significant stage of Georgia's history. The transition from socialism to capitalism issued urgent challenges in different spheres of life. Among them is linguistics. "The process of the development of the common global network demanded the placing of information on new carriers. Accordingly, linguists faced the necessity of the creation of electronic resources" (Tandashvili & Purtskhvanidze, 2011). The utilization of these resources during the teaching-investigating processes has been positively assessed by the scholars of different countries: "The use of ICT is underpinning our students' education (Fullan, 2013)… As a matter of fact, ICT has improved the ways of accessing knowledge, researching, communicating, socialising and succeeding in all levels of education" (Camilleri & Camilleri).

It is noteworthy that during the recent years, one of the most utilized tools has become language corpora, "which have many different affordances and applications… This typically includes the application of frequency data in determining the sequence in which linguistic items should be introduced, in identifying key multiword units and a wide range of lexico-semantic patterns… This essentially indirect approach (Römer, 2011) to corpus data is taken by syllabus designers, materials writers, lexicographers and testers" (Boulton & Thomas, 2012).

The utilization of new technologies "can be useful to rethink access to cultural heritage digital resources and their use or re-use by different publics such as teachers, students…" (Ferrara et al., 2013). The widely-spread models of implementation of electronic devices in teaching-researching processes are:

- the extended metadata model, "which has been developed by covering methodological resources and learning objects in order to increase their accessibility and usage in teaching process" (Kubilinskiene & Dagiene, 2013);
- concept mapping – used for the creation of corpora;
- the cognitive frameworks – "used by high school science, technology, engineering, and mathematics (STEM) educators as they search for digital resources and conceptualize the integration of digital resources into their teaching" (Carlson & Reidy, 2004), etc.

In it noteworthy that the creation of the Georgian digital era was initiated by the establishment of Georgian-German scientific relations, which can be regarded

as a foundation of the development of corpus-based researches in Georgia. The major activities started in 1994-1998 with the sojourns of two Georgian professors (V. Imnaishvili & Z. Sarjveladze) in Frankfurt am Main. An initiator of Georgian-German scientific relations was prominent German Caucasiologist Jost Gippert, whose inaugural dissertation on the study of Iranian loanwords in Armenian and Georgian (1991) vividly revealed his early interest in the Georgian language. J. Gippert created "the first electronic resources for the Georgian language within the framework of TITUS – an electronic platform of the Indo-European languages" (Tandashvili & Purtskhvanidze, 2011). He actively collaborated with Georgian scholars, who worked at different higher educational institutions of Georgia. The history reveals the products of this cooperation - several bilateral projects oriented towards the creation of corpora. The most prominent product - Georgian National Corpus (GNC) - which "covers the complete time range from the earliest attestations of written Georgian in the 5th century C.E. up to the present day has evolved from several corpus building initiatives that have been realized since the late 1980s, mostly in joint endeavours of German and Georgian partners. This is true, first of all, for the text database of the TITUS and ARMAZI projects in Frankfurt" (Gippert & Tandashvili, 2015) and two additional pillars: "the GEKKO corpus run by Paul Meurer in Bergen… and the extensive corpus of dialectal varieties of spoken modern Georgian ('Georgian Dialect Corpus', GDC) compiled under the direction of Marina Beridze at the Arnold Chikobava Institute of Linguistics in Tbilisi" (Gippert & Tandashvili, 2015). The major importance of GNC lies in the fact that it unites the work of scientists and students (of TSU). The work of the latter comprises digitalization of Georgian literary monuments and annotation of already-existed texts i.e. the enrichment of electronic data with a linguistic meta-information, which is presented on different independent levels. As a result, students become research-oriented and digitally-qualified.

In addition to GNC, Georgia's digital reality has encompassed several projects authorized by different higher educational institutions, for instance:

- Projects of Ilia State University - Georgian Language Corpus; The Epigraphic Corpus of Georgian; Prosopography of Georgia, etc.
- Summer schools organized by Batumi State University and Goethe University Frankfurt (GUF) - Digital Humanities and Language Documentation; Digital Humanities and Kartvelology, etc.
- Projects initiated by Tbilisi State University (TSU) – Winter School "Digital Humanities – Kartvelology and the Challenges of the 21st century" (organized by TSU and GUF); Development and Introduction of Multilingual Education Programs at Universities of Georgia and Ukraine; Akaki Shanidze's Digital Library and Text-corpus, etc.

The given list shows the progress of Georgia's ongoing digitalising processes. However, the significance of certain projects requires a more in-depth analysis.

Contemporary Corpus-based Researches

Nowadays, one of the major aspirations of Tbilisi State University is the integration into European higher education area. The major catalyst of the given process is the implementation of bilateral/multilateral research projects and joint teaching programs created in cooperation with foreign higher educational institutions. TSU has already taken certain steps in this respect. "In terms of the cooperation with Volkswagen Foundation following three doctoral programs are prepared: digital humanities, a mixed doctoral program in mathematics and a doctoral program in the management of education" (The first cross-national doctoral program in digital humanities).

It is noteworthy that 24 February 2016 was a remarkable day for TSU. On this day, the university hosted a grand opening of the preparatory tour of the Cross-National Doctoral School "Digital Humanities" leading towards the implementation of one of the possible outcomes of Georgian-German relations - a joint doctoral program oriented towards a computer-aided research in Georgia and generally, in the Caucasus region. The major focus of the program is planned to be Caucasian languages, literatures, history as well as other aspects of humanities and social sciences (Caucasiology, Kartvelology, Caucasian history, etc.). The doctoral students will be jointly supervised by Georgian and foreign scholars on the basis of the co-tutelage. Their research and scientific background will be supported and broadened via two types of training facilities - workshops and individual lectures. The given type of PhD studies will be innovative for the Georgian students. It will fuel their aspiration towards the acquisition of western educational practices. However, the preparatory tour has already enriched candidates' digital skills. It comprised three workshops and two qualifying rounds held in Georgia and Germany. The workshops encompassed the prominent western scholars' presentations demonstrating two types of empirical studies (descriptive or observational studies) covering such research questions/aspects as digital resources (utilization and structuring of corpora, audio-visual facilities, etc.), structuring of computer-aided researches, harvesting, digital-based perspectives, field-working, mapping, creation of word-banks, etc. The qualifying rounds were oriented towards the identification of possible candidates for the doctoral program on a competitive basis. All contestants presented their topics in 15-minute presentations, followed by 10-minute discussions with one of two selection committees. As a result, 27 candidates were chosen out of 54 during the first round. Twelve of them will get scholarship in case of the implementation of

the joint program. The contest revealed that a great number of Georgian students (54) were interested in the acquisition of digital skills via becoming a student of Cross-National Doctoral School. The presentations of the contestants indicated to their background – the attendance of summer and winter schools in digital humanities or Kartvelology. Therefore, the phases of the methodology of the given project focuses on the following procedures: 1. Participation in winter/summer schools in digital humanities or Kartvelology; 2. Participation in the preparatory tour comprising presentations demonstrating different research questions of an empirical study; 3. PhD studies. It is noteworthy that after the fulfilment of all stages foreseen by the given project, Georgia will have a group of progressive, digitally-skilled youngsters, which means a lot to a small developing country.

The creation of the Georgian digital era was facilitated not only by Georgian-German scientific relations, but by Georgian-Austrian cooperation as well. The initiator of the given cooperation was Prof. Hugo Schuchardt – "an eminent Austrian linguist, a well-known specialist of the Roman languages… a full member of the Georgian linguistic society" (Imnaishvili, 2004). History states that H. Schuchardt "got interested in the Georgian language in the 80th of the 19th century. In one of his last letters he indicated that Georgian was a sympathetic and an interesting language for him" (Imnaishvili, 2004). H. Schuchardt played an important role in the development of the Georgian manuscript studies. At the end of the 19th century, after a prolonged trading peripeteia, he acquired five Georgian manuscripts and three single papers - precious monuments of Georgian material culture, which had been stolen from Mount Sinai. After professor's death, the manuscripts as well as certain estate materials were preserved at the University of Graz. They attracted Georgian society's attention throughout the previous century. Several Professors of TSU (V. Imnaishvili, D. Tvaltvadze, S. Sarjveladze, M. Machkhaneli, etc.) visited Graz and looked through the manuscripts. However, they were not accessible to a wide circle of scholars.

The digital era of the 21st century brought novelties in this respect. "In the late nineties… first steps were taken to process and publish estate material"[1] (Hugo Schuchardt Archiv). The materials were initially processed by the staff of the university. However, during 2012-2015 the important project "Network of Knowledge" was initiated by eminent scholar Bernhard Hurch. The project was funded by "Austrian Science Fund (FWF) under project number P 24400-G15"[2] (Hugo Schuchardt Archiv). It encompassed the creation of the website "Hugo Schuchardt Archiv" presenting a lot of works of the prominent scholar in a digital

[1] In den späten 90er Jahren… wurden erste Schritte zur Aufarbeitung und Publikation von Nachlaßmaterialien gesetzt.

[2] Fonds zur Förderung der wissenschaftlichen Forschung in Österreich (FWF) unter der Projektnummer P 24400-G15.

format. During the preparation of the website the Austrian scientists were assisted by the scholars of different countries. Among them were professors of TSU, who visited Graz within the framework of mobility projects. As a result of a hard multilateral work, the world society acquired a precious product:

1. "The electronic publication of H. Schuchardt's complete works with accompanying secondary literature and other relevant biographical and bibliographic materials;
2. The processing and electronic recording of a handwritten estate;
3. The letter database, which compiles the correspondence relevant for scientific and research history and electronically presents it with metadata;
4. H. Schuchardt's materials for the contextualization and impact story"[3] (Hugo Schuchardt Archiv).

It is noteworthy that the digitalization of H. Schuchardt's heritage will make a significant impact on the development of the following branches of Georgian science: historical linguistics, manuscript studies, lexicology, history, sociolinguistics, etc. Certain materials of the archive can be included in the syllabi of the courses taught at TSU. Moreover, they will be successfully used by PhD students and scientists during working on their theses, monographs, etc.

The above mentioned indicates that initially digitalising processes were carried out within the framework of joint projects. However, nowadays the implementation of up-to-date digital processing is led by students and scientists of TSU. One of the recently carried out projects is "A. Shanidze's digital library and text-corpus" initiated by the students of the direction of Georgian philology. Within the framework of the project, its participants digitalised, processed and enriched with meta-information the major works of eminent Georgian scholar A. Shanidze. The project was mainly focused on carrying out the following procedures:

1. Empirical studies i.e. collection and analysis of the primary data on the basis of the observations and experiences;
2. Processing of the materials: the creation of electronic versions of texts in accordance with UNICODE i.e. transformation and converting of texts into a digital format; an inner-structural processing of a text from the point of view of referencing i.e. a textual markup; the insertion of relevant meta-data in a special base enabling a customer to find the materials of a corpus according to the relevant marks;

[3] 1. Die elektronische Veröffentlichung von Schuchardts Gesamtwerk mit der dazugehörigen Sekundärliteratur und anderen relevanten biographischen und bibliographischen Materialien; 2. Die Bearbeitung und elektronische Erfassung des handschriftlichen Nachlasses; 3. Die Briefdatenbank, die die wissenschaftlich und forschungshistorisch relevanten Korrespondenzen aufarbeitet und mit Metadaten versehen elektronisch präsentiert; 4. Materialien zur Kontextualisierung und Wirkungsgeschichte Schuchardts.

3. Presentation of final results to the university audience/supposed customers of the products of the project.

The involvement in digital processing was the greatest experience for the students in terms of enhancing professional skills in researching, group working and processing digital resources. After the completion of the project, its participants will be able to enrich the created digital library and text-corpus with new materials (texts, audio/video and photo materials). Therefore, it will enable the scholars and students specialised in the Georgian philology, Kartvelology and related branches to use A. Shanidze's works on every stage of studying or investigating. New perspectives of researching and knowledge acquisition will be opened for them.

Besides the creation of digital projects, TSU is oriented towards the implementation of digitally-related teaching courses, which use e-books, databases, corpora, e-archives, audio-video materials, etc. Within the framework of these courses (palaeography, history of literature, codicology, reviewing and referencing of the English text, etc.) students process materials taken from databases and actively use corpus-methods for the preparation of their theses or presentations. The given methodology of teaching gradually gains a foothold.

Conclusions

The 21st century poses new challenges before the educational bodies of the world. TSU as a leading higher education institution of the Caucasus region aspires towards the implementation of innovative strategies via the creation of bilateral projects and innovative teaching courses oriented to the utilization of digital resources: software, databases, corpora, e-books, e-archives, audio-video materials, etc. The intensive utilization of the given facilities has certain disadvantages. The lack of electronic devices cannot insure an appropriate support of digitalising processes. Moreover, the limited availability of training courses prevents educators from the adaption of their teaching methodologies to innovative learning styles. Therefore, we believe that only an efficient collaboration with foreign partners and implementation of bilateral projects (similar to the above-discussed ones) can solve these problems. As a result, Georgia and other developing countries will rear progressive, digitally-skilled and research-oriented future generations.

Summary

"Digital libraries and digital archives are the information management systems for storing, indexing, searching, accessing, curating and preserving digital resources which manage our cultural and scientific knowledge heritage (KH)" (Agosti et al., 2018). The prominent

scientific centers and educational institutions of the world strive to implement digital resources in their scientific life in order to enhance teaching, researching and investigating processes. TSU as a leading educational body of the Caucasus region shares the innovative tendencies of prominent institutions. Nowadays, it faces an intensive implementation of projects oriented towards the creation and utilization of digital resources (the so-called electronic resources): software, databases, corpora, e-books, e-archives, audio-video materials, etc.

The given paper discusses three university projects. Two of them (*Hugo Schuchardt Archiv* and *Akaki Shanidze's digital library and text-corpus*) are oriented to the creation of digital archives and databases of eminent scholars, who played an important role in the scientific life of the Georgian society. The open accessibility to their works, correspondence, manuscripts, postcards, drafts and other items of heritage will make a significant impact on the development of the following branches of Georgian science: historical linguistics, manuscript studies, lexicology, history, sociolinguistics, etc. Scholars and students specialised in the Georgian philology, Kartvelology and related branches will use digitally-presented materials on every stage of studying and investigating.

The greatest attention must be paid to the fact that two above-discussed projects (*The preparatory tour of the Cross-National Doctoral School "Digital Humanities"* and *Akaki Shanidze's digital library and text-corpus*) have a student-oriented character. Their major actors are students, who enhance their professional skills in project-making, researching, individual or group working and processing digital resources. Therefore, the highlighted projects can serve as exemplary models for those universities of the developing countries, which strive to implement innovative student-oriented and digitally-enriched strategies of teaching and researching.

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RESEARCH OF THE LEARNING PROCESS IN PROFESSIONAL UNIVERSITY

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Abstract. *The purpose of this article is to offer an insight into the results of the situation analysis of teaching technical disciplines in professional universities. The aim of this study is to better understand the impact of learning environment organization into students' groups at youth age while teaching technical subjects. Qualitative research method (unfinished sentence method) was used to study the opinion of students about the organization of teaching/learning process. Quantitative method of research (vector modelling by В. Ясвин) was used revealing prevailing types of learning environment in professional university.*
Keywords: *professional university, learning environment organization, students' groups at youth age, sustainable development strategy.*

Introduction

Considering the crisis of higher education in the current period and the lack of qualified specialists in the construction industry, as well as the massive migration of young specialists raises concerns regarding the prospect of technical universities in Latvia. At the beginning of the 2015/2016 academic year, the total number of students in higher education institutions in Latvia was 84,282. In comparison with the previous academic year the number of students decreased by 2 % (Izglītības un Zinātnes ministrijas 2015. gada publiskais pārskats, 2016). At the beginning of the 2016/2017 academic year, the number of students at Riga Technical University and Daugavpils University has decreased by 4 %, at Rezekne Technology Academy – by 7 % (Augstākās izglītības finansējums, 2017). In 2015, twice as many working-age people emigrated from Latvia (16.8 thousand), compared to the number of immigrants at the same age group (7.2 thousands) (Demogrāfija, 2016: 9). In 2015, due to the long-term international migration population number in Latvia dropped by 10 640 (Demogrāfija, 2016: 107). In 2016, due to the international long-term migration, population number in

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Latvia dropped by 12 229 (Demogrāfija, 2017: 121). Similar problems are observed not only in Latvia. Nowadays many scientists all over the world focus on the crisis of higher education - Roger L. Geiger, professor at Pennsylvania State University, Geoff Thompson chair of governors at the University of East London, Tuguz Fatima Kazbekovna, professor at Adyghe State University and others. Kofi Annan, winner of the Nobel Peace Prize and former general secretary of the United Nations, famously said: "Education is the premise of progress, in every society, in every family" – and currently the UK academia is not able to achieve it (Thompson, 2017). A recent Pew Research Center poll showed that 75 percent of adults think that higher education has become unaffordable — and most of them believe that it's not worth the money (Loconte, 2017). Joseph Loconte (2017) remarks the necessity of meaningful conversation about the fundamental purposes of higher education and the best way to achieve them.

The answer of this question can be found in the 2030 Agenda which is a plan of action for people, planet and prosperity. The new Agenda for Sustainable Development also notes the need of providing inclusive and equitable quality education at all levels, including tertiary technical and vocational education. All students should have access to learning opportunities that helps them acquire the knowledge and skills needed to exploit personal opportunities and to participate fully in society taking into account their different capacities and circumstances. The 2030 Agenda is determined to ensure that economic, social and technological progress occurs in harmony with nature (Transforming our world: the 2030 Agenda for Sustainable Development).

Thus, the main aim of an effective professional university is to educate not only a knowledgeable, qualified specialist, but also an individual with the following abilities (in accordance with sustainable development):

- to work successfully in a team;
- to foster inter-cultural understanding, tolerance, mutual respect and an ethic of global citizenship;
- to be capable sustainably manage the natural resources;
- to be ready for shared responsibility.

During students' educational process a teacher has to organise the teaching/learning process so that it should promote students' development through common knowledge constructing and decision making. Therefore the first phase of the study deals with an exploring the students' views on the organization of teaching/learning process in a technical university.

Theoretical background

Analysing the psychological literature, we come across different views on the classification of age group, which identify biological and socio-historical

factors. Thus, the different scientists' opinion about the youth age group chronological range tend to vary. Age is defined as a time-limited part of the individual's psychic development, which is characterized by a combination of certain physiological and psychic changes (Petrovskis, 1979; Выготский, 1999; G. Svence, 2003; Jirgena & Mārtinsone, 2007; Rungule & I. Karklina, 2009). In accordance with the Youth Law (version 2010) of the Republic of Latvia young people are persons from 13 to 25 years of age (Youth Law, 2008). Student's youth age is from 17 to 27 years respectively. Summarizing the analysed works, we can conclude that the age of 17-25 years can be considered as a youth when the most serious, deep relations with other people are formed and professional and personal self-determination takes place, which involves deliberate choice and creative approach in problem solving and decision-making.

In traditional training programmes, especially in technical disciplines, the attention is not being paid to students' creativity and creative potential for escalation. The teaching/learning process is more focused on the reproduction of the study material rather than on the creation of something new. During the educational process, students would need to integrate diverse knowledge and skills, because the quality of education these days is determined by directly integrated body of knowledge. In favour of the teaching/learning process reorganization in technical universities the changes were implemented according to the socio-cultural aspect. As it is highlighted in the introduction, the growing changes in society and in the field of science bring the problem of teaching and learning into focus in technical university.

Therefore, the research object in the first phase of the study is organization of a teaching process in a technical university.

Research subject - the model of students' integrative collaboration in a technical university (van Gejeka, 2013).

Research aim - to develop and experimentally verify students' integrative collaborative model for teaching process reorganization in a technical university in the second phase of the study.

Research questions in the first phase of the study - what are the main reasons for the technical university students' dissatisfaction with the organisation of a teaching/learning process?

Research tasks in the first phase of the study - to explore students' views on the organization of teaching/learning process in a technical university.

Methods and methodologies

In the first phase of the study theoretical methods (pedagogical, philosophical and psychological literature analysis and evaluation to summarize and generalize findings about the key questions of the research as characterization

of youth, etc.) and empiric methods (qualitative research methods: unfinished sentence method, questionnaires) were used to study technical university students' opinions about the organization of teaching/learning process in in a technical university in order to emphasise the opportunities of receiving vocational education in Latvia. Qualitative methods (unstructured questionnaire) spotted some organizational problems in teaching technical subjects in professional university. In order to find out students' opinions about the learning process organization at their university, a survey was conducted within this study (the method of unfinished sentences). The survey is one of the most popular data mining methods (Mārtinsone & Pipere, 2011). This method allows us to obtain the initial information, which includes the respondents answers to the written questions that contain the research problem at the empirical level, as well as the content of the received answers (Kristapsone, 2008: 225).

Unfinished sentence methods aim is to determine students' opinions about the learning process organization of youth age groups.

Procedure. Several individual surveys were organized, asking respondents (which study technical subjects as "Reinforced Concrete Structures design", "Metal Structures design") to fill in the questionnaire with requested information, continuing 23 unfinished sentences. Two Latvian professional universities from different regions have been chosen as a research area with students aged 17-27 years. The questionnaires were anonymous. The number of respondents were 101:

1) Rezekne Technology Academy (RTA), course 3, 38 respondents;
2) Riga Technical University (RTU), course 3, 63 respondents.

Several students were not enthusiastic according with necessary to answer the questions of survey and expressed dissatisfaction with the length of the questionnaire.

Qualitative analysis of the survey results with unfinished sentences:

Only a few respondents (10 %) answered the first sentence "I like ..." with "I like to study". The following answers were repeated:

"I like to relax."(RTU -16 %, RTA-19 %)

"I like the practice time when you don't have to sit at school."

"I like to meet friends." "I like to sleep." etc.

To the second sentence "The happiest moment is ..." respondents gave the following answers:

".. good grades." (25 %)

"... spend time with your family."

".. relax." (6 %)

"I have not had any." (RTA-5 %) etc.

To the sentence 3 "I want to know ..." respondents replied:

"... everything about my profession." (RTU-27 %, RTA-29 %)

".. everything " "., who I am."

To the sentence 4 “At lecture ...” respondents replied:
“... it's often boring”, “I am sleepy”, “…it is uninteresting”,
“I'm sad”, “I do not like to learn.” (RTU-10 %, RTA-8 %),
“…is interesting” (RTU-4 %, RTA-8 %).
To the sentence 5, “I regret that ...” respondents answered:
“...I don’t do anything in time.” (RTU- 30 %, RTA – 30 %)
To the sentence 7, “My studies are hampered by...” respondents replied:
“… some teachers.” “… a long learning time.”
To the sentence 12 “Teacher in his/her work...” respondents replied:
“…is very positive, friendly, and favourable.” (RTA – 40 %)
“…dominates.” (RTU – 10 %)
„…normal, positive, but sometimes negative; neutral, disinterested.” (RTU – 10 %)
To the sentence 14 “I suffer ...” the respondents answered:
“... from the great amount of work.”
“... from laziness,”
“… from time-lag”.
To the sentence 15 “I will be unhappy ...” respondents answered:
“… if it will be necessary to make a presentation in front of the public.”
“… if I will not be able to finish the university or exams.” (17 %)
To the sentence 17 “During the practice work…” respondents answered: “… I hardly focus,” “… I am always in rush”, “…I have a stress”.

Students’ answers to the questions about studying in the university also included dissatisfaction, pessimism and excitement:

“My crazy teachers, society.” “I feel the excitement, the tension.”
“My nerves are tense.” “I did not succeed in the university.”
“The future will not be better.” “I like to relax, drive, etc.”

Summing up the answers, it was concluded that sometimes students do not feel satisfied with their work in the university, can’t adequately motivate themselves to study and don’t consider the learning environment as attractive and motivating, but rather overly dogmatic. Although the majority of respondents evaluated the learning environment positively (“likes this place (university), but ...”), every one of them, however, noted that it should be “changed ...” which confirms the topicality of the research. Such answers as “the problem - money, lack of time,” point out the reasons why students consider university as one of the most serious problems in their lives which limits their development and freedom.

The results of the research lead to a question about the most important learning environment factor as relationships with peers or relationships with educators. The analysis of the results of structured interviews provides a partial answer to these questions. Analyse of the answers to questions No. 9, 11, 12, 17

was focused on the study of university teaching creativity and identifies the following respondents' answers:

"It's boring to be in the classroom."

"The position of a teacher seems to be aggressive."

"Design of the classroom is grey, boring." (RTU – 80 %)

So, students describe the learning process as boring, relying on reproduction and pointing to the authoritarian position of the teacher. Overall, the results of the survey show that there is no creative learning environment in the studied universities.

In the second part of the study, quantitative methods of research (vector modelling) revealed prevailing types of learning environment in the lectures of technical subjects. The method of "vector modelling" by В. Ясвин (2001) was adapted by the authors, and allowed them to build up a coordinate system, which consists of 2 axes: "activity-passivity" and "independency-dependency", making four different areas (see fig.1).

A microanalysis of the learning environment was carried out on the basis of student responses to 6 simple questions. The first three questions were designed to identify the availability of opportunities for student control in the development of the learning environment and the other three questions were formulated to elicit particular opportunities for developing student personal activities. An each answer allows us to mark it on the corresponding vector.

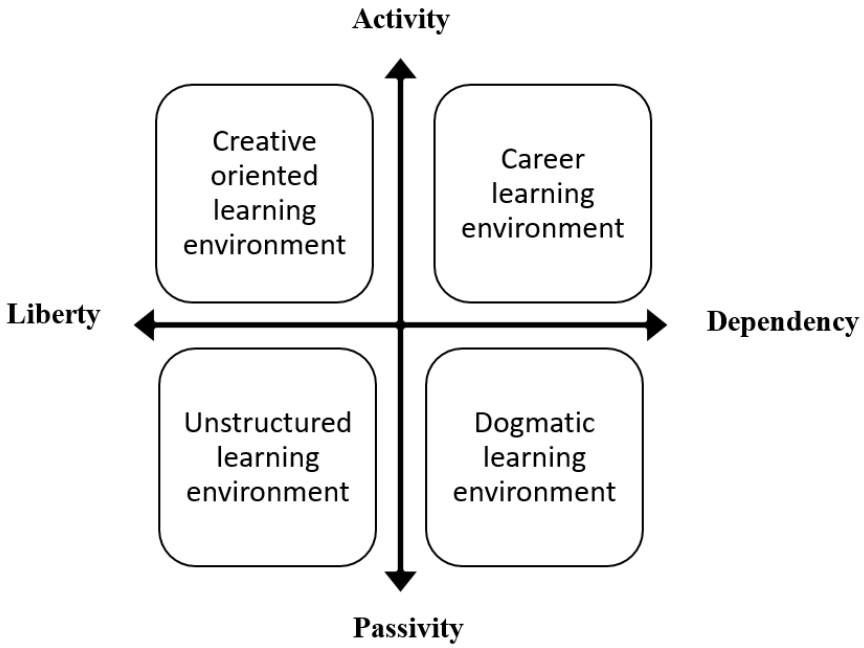

Fig. 1. **Spectrum of possible vector models of learning environment**

Therefore, the indicators of learning environment states represent the inner or subjective awareness of the students on the lesson, which is reflected in their

answers. The typological sample is based on two characteristics: age (youth age) and specialty (construction).

Results

It has been pointed out that in RTU a dogmatic (43,4 %) and career oriented (41,51 %) learning environment types prevail (see fig. 2). In dogmatic type of environment a developing personality is characterized by total dependency. The authoritarian teaching styles are more common there. Approximately three quarters of RTA students characterise the learning environment in their university as career oriented. In such type of environment a developing personality is characterized by almost total activity and dependency, which is least acceptable to the people in a democratic society, but very beneficial for a non-democratic government.

In addition, the diagram demonstrates approximately half the RTA students were very satisfied with the creative learning environment. However, in RTU these students are a small minority. This can be explained by the organization of the educational process in RTA in a completely new modern building, commissioned just 3 years ago.

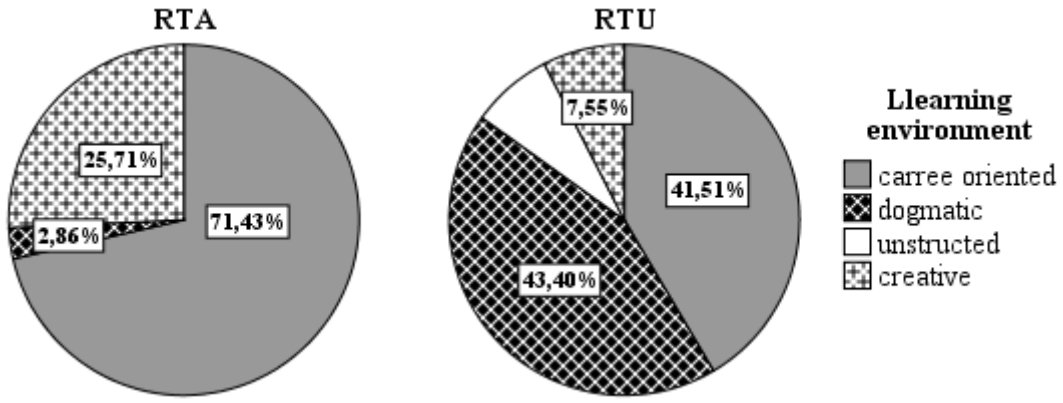

Fig. 2**. Microanalysis of the learning environment in Riga Technical University (RTU) and Rezekne Technology Academy (RTA)**

While in the RTU the repair of the old university building was started only a month ago. Consequently, it is important to organise a teaching/learning process in such a way that it would allow students to be satisfied with the teaching and with the facilities (building, rooms, equipment), to take an active position in dealing with creative tasks, would teach them to think creatively, to draw conclusions, to resolve conflicts amicably, to seek information, to understand the different knowledge spheres of mutual relationships and to be independent researchers.

Conclusions

The research deals with the issue of demand for highly-qualified, skilful and competitive specialists able to work in interdisciplinary team and organize collective work. Undoubtedly, the results of research indicated a necessity of learning environment reorganization in professional university, which logically lead to the second phase of the research - development of the practice scenario in order to prove the efficiency of integrative method in technical subjects teaching such as "Reinforced Concrete Structures", "Metal Structures", basing it on the integrative students' collaboration widely using the teamwork. Accordingly, the authors of the conducted research suggest to use a team project method (learning environment reorganization model) during the students workshops at Riga Technical University. In accordance with Youth Law of the Republic of Latvia (version of 2010) one of the main tasks in youth work is to support and promote youth initiatives and provide favourable conditions for their intellectual and creative development (Youth Law, 2010). Therefore, this study is timely.

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СОВРЕМЕННЫЕ ОБРАЗОВАТЕЛЬНЫЕ ТЕХНОЛОГИИ КАК УСЛОВИЕ УСПЕШНОЙ РЕАЛИЗАЦИИ ИНДИВИДУАЛЬНОЙ ОБРАЗОВАТЕЛЬНОЙ ПРОГРАММЫ СТУДЕНТОВ

Modern Educational Technologies as a Condition for the Successful Implementation of the Individual Educational Program of Students

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Abstract*. In the modern model of education the attention of teachers is paid to the implementation of the individual educational route of the student. The article discusses the possibilities of modern educational technologies. The problem field of research is a contradiction between the need for higher education to implement the individual educational route of the student and the lack of attention of teachers to the selection of appropriate educational technologies. The aim of the study was to study the possibilities of modern educational technologies to strengthen the individuality, subjectivity, human capital of the student.*
Keywords*: an individual learning route, the learning environment, modern educational technologies.*

Введение
Introduction

Актуальность исследования состоит в наличии противоречия между необходимостью работы высшей школы на реализацию индивидуального образовательного маршрута студента и недостаточным вниманием преподавателей к отбору соответствующих образовательных технологий.

Цель исследования состоит в необходимости изучения возможностей современных образовательных технологий для усиления индивидуальности, субъектности, человеческого капитала студента.

Методы исследования, использованные в работе: теоретический анализ и синтез материалов по проблеме изучения, обобщение, дискуссия, беседа.

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База исследования: студенты Псковского государственного университета первого – четвертого курсов бакалавриата направлений подготовки «Социальная работа», педагогических специальностей различных факультетов (иностранных языков, физико-математическом, филологическом).

В настоящее время образовательные технологии во многом обращены к решению достаточно новой для образования проблемы: ориентация процесса обучения на развитие человеческого капитала. В широком смысле человеческий капитал – интенсивный производительный фактор экономического развития общества.

Развитие человеческого потенциала сегодня берется за основу оценки уровня развития той или иной страны, и критериями оценки при этом являются:

а) продолжительность жизни,
б) уровень образования,
в) валовый внутренний продукт.

Директор международного института планирования образования при ЮНЕСКО Жак Аллак признает, что успех государства зависит от степени доступа к знаниям, поэтому все страны мира в той или иной степени стремятся к улучшению образования и считает развитие образования вкладом в будущее. Образование как важнейший социальный институт, содействующий развитию людских ресурсов, демократии и равенству, по мнению ученого, выполняет следующие важнейшие функции в обществе:

- развивает творческие способности человека, углубляя его участие в экономических, социальных и культурных отношениях в обществе, обеспечивая более эффективный вклад в инновационное развитие человечества;
- оказывает решающее влияние на социальный прогресс и продуктивность экономики;
- играет ключевую роль в технологических преобразованиях;
- обеспечивает уровень соответствия человека современным требованиям, развитию рациональности и других качеств человека, необходимых ему в повседневной жизни;
- осуществляет передачу и трансформацию культуры;
- воспроизводит и создает социальные функции и статусы как основы для производства «более одаренного и разнообразного человеческого капитала»;
- улучшает взаимоотношения между человеком и социальной, и природной средой (Карпова, 2004).

Для того, чтобы каждый студент воспринимал себя в качестве человека, способного стать образованной частью трудовых ресурсов страны, в системе высшего образования (в продолжение системе среднего образования) необходимо выполнение определенных педагогических условий. С опорой на исследования В. С. Ефимова, кроме внимания к экономическому модусу человеческого капитала, нельзя недооценивать внимание к биологическому (ответственному за здоровье, физическую активность человека) и социальному (ответственному за инициативность) модусам (Ефимов, 2010). Это с необходимостью требует включения в процесс обучения здоровьесберегающих технологий и технологии учебного проектирования, но они дают гарантированные результаты при условии того, что именно с самых первых дней учебы в вузе каждый студент становится субъектом познавательной деятельности, то есть активно включается в саморазвитие. Педагогически организованный начальный этап пребывания студента в вузе обеспечивает успешный старт в дальнейшем обучении, ту мотивацию, то особое состояние студента от начала обучения в вузе, которое определяет целенаправленную поведенческую деятельность студента.

Теоретическая база исследования
The theoretical basis of the study

Теоретико-методологическую основу исследования составили концептуальные методологические исследования, реализующие:

- системный подход к изучению личности и деятельности;
- положения концепции человека как активного субъекта жизнедеятельности;
- концепцию субъектности;
- принцип моделирования;
- основные положения современных гуманистически ориентированных теорий личности;
- теория деятельности разрабатывалась отечественными психологами;
- проектирование как деятельность в рамках психологической концепции деятельности рассматривалось в публикациях;
- здоровьесберегающие технологии реализуются на основе личностно-ориентированного подхода. Осуществляемые на основе личностно-развивающих ситуаций, они относятся к тем жизненно важным факторам, благодаря которым учащиеся учатся жить вместе и эффективно взаимодействовать. Предполагают

активное участие самого обучающегося в освоении культуры человеческих отношений, в формировании опыта здоровьесбережения, который приобретается через постепенное расширение сферы общения и деятельности учащегося, развитие его саморегуляции (от внешнего контроля к внутреннему самоконтролю), становление самосознания и активной жизненной позиции на основе воспитания и самовоспитания, формирования ответственности за свое здоровье, жизнь и здоровье других людей;

- проблема мотивации не имеет однозначного решения, с разных теоретических позиций рассматриваются базовые понятия «мотив» и «мотивация» в исследованиях.

Результаты теоретического исследования
The results of theoretical research

Решению проблемы способствования переходу студента к состоянию саморазвивающейся и индивидуально-рефлексирующей системе, на наш взгляд, помогает технология «Дорожная карта студента». «Дорожная карта» - специально созданный текстовый документ - вручается каждому студенту на первой встрече знакомства со студентами по направлению подготовки «Социальная работа». Именно этот текст в работе куратора с группой актуализирует в первую очередь личностные смыслы студентов в познавательной деятельности. Педагогические исследования убеждают в том, что часто учение как самостоятельная познавательная деятельность и саморазвитие порой даже на 3 курсе обучения в вузе не входят в круг наиболее важных ценностей студентов. Учеба для студентов соотносится в первую очередь с формами и внешней атрибутикой учебной деятельности. Многие из них, ставя перед собой цель в виде интересной и достойно оплачиваемой работы, не отдают себе отчета в том, что «лесенка их успеха выстраивается из непрерывного приобретения знаний, умений и навыков, постоянной работы над собой» (Лантикова, 2010). Педагогическая технология «Дорожная карта студента» помогает перевести внешние мотивы учебной деятельности студентов в вузе, а порой даже имеющиеся познавательные интересы в личностные смыслы самостоятельной познавательной деятельности. Это происходит благодаря тому, что данная технология раскрывает для студента значение тех занятий и форм учебной деятельности, которые начинаются для него с первых дней учебы в высшем учебном заведении.

С первых дней обучения в вузе дорожная карта помогает настроить каждого на то, что долгий четырехлетний путь становления в качестве

социального работника проходится каждым из студентов по особому, индивидуальному маршруту образования самостоятельно, с позициями «субъект учебной деятельности», «личность», «индивидуальность».

Возрастающая роль образовательного процесса в развитии личности, ее способности управлять собой, самостоятельно усваивать постоянно обновляющуюся информацию побуждает пересмотреть представления о формах, методах, средствах и условиях обучения.

Необходимо использование таких образовательных технологий и методов, которые в наибольшей степени обогащают мотивацию учебной деятельности, способствуют развитию готовности будущих специалистов к выполнению профессиональной деятельности, а также развитию самостоятельности, проявлению творческой индивидуальности и полноценной самореализации.

Именно такой подход к подготовке современных специалистов социальной сферы должен способствовать повышению уровня их социально-профессиональной мобильности и конкурентоспособности.

Компетенции наиболее эффективно формируются в образовательном процессе вуза посредством технологий, способствующих вовлечению студентов в поиск и управление знаниями, приобретению опыта самостоятельного решения разнообразных задач. К таким технологиям относится и технология учебного проектирования, которая носит прикладной, междисциплинарный характер и направлена на формирование такой важнейшей компетенции человека, как умение быстро и правильно решать возникающие проблемы в современном мире. Данная компетенция особенно важна при подготовке бакалавров социальной работы, т.к. одна из важных функций профессионала социальной работы состоит в том, чтобы помочь человеку избежать различных рисков и угроз современного мира, выстроить траекторию своего жизненного пути, активизировать свои силы и ресурсы.

Социальный проект выступает основной формой социально-преобразующей деятельности и средством развития социальной активности студентов. В ходе социального проекта осуществляется совместная деятельность, целью которой является конкретное социальное действие, позволяющее включать студентов в некую социальную активность. В ходе социального проектирования студенты получают опыт самостоятельного общественно-полезного действия, положительный опыт социально-преобразующей деятельности, опыт самоорганизации и принятия на себя ответственности за других людей. У студентов формируется опыт активного социального взаимодействия с миром («знаю, хочу, умею и имею опыт организации»), формируется проектная компетентность (умение предвидеть позитивные результаты социальной деятельности), развивается

инициатива, самостоятельность, креативность в решении социально-значимых проблем.

Социальное проектирование предполагает самостоятельное общественное действие на благо и заботу о себе и других людях.

Сущность социально-проектной деятельности в вузе, по мнению М. В. Колесниковой (Колесникова, 2007) заключается в том, что студент:

- теоретически осмысливает проектируемое явление и определяет практическую направленность действий по изменению данного явления;
- овладевает методологией и технологией выполнения конкретной специфической деятельности, алгоритм которой он выстраивает и предлагает реализовать для преобразования социального явления;
- получает возможность самостоятельно определить и реализовать конкретные действия по достижению целей и задач проекта; взять на себя роль субъекта социально-проектной деятельности (разработчика, лидера, организатора, исполнителя и т. д.);
- оказывается в ситуации необходимости актуализации и мотивирования собственной социальной активности, трансформирующейся в свойство личности.

Внимание в процессе обучения к развитию человеческого капитала каждого студента предполагает сделать его ответственным за важную составляющую его жизни - качества здоровья. Многими исследованиями доказано, что здоровье является важной составляющей счастья и будущее нации, его благополучие, зависят от здоровья сегодняшних детей. В уставе Всемирной организации здравоохранения здоровью дается такое определение: здоровье – это состояние человека, которому свойственно не только отсутствие болезней или физических дефектов, но и полное физическое, душевное и социальное благополучие. Холистическое здоровье рассматривает три направления – физическое, социальное, эмоциональное (психическое). Ориентируясь на идеи Смирнова Н. К., который отмечает: «Урок – главное поле реализации здоровьесберегающих технологий и проверки педагогической компетенции учителя. Если учитель не может заслужить любовь ребенка и подарить ему любовь, он рискует получить ненависть» (Смирнов, 2003).

Идея здоровьесбережения формируется на следующих базовых модулях:

Первый модуль – это Методология превентивного обучения (предупреждающая, профилактическая). Превентивное обучение представляет собой новую область педагогической деятельности, в которой

тесно переплелись современная педагогика, практическая психология и идеи медицинской профилактики:

- Групповая работа (группа - это общность людей, объединенных совместной деятельностью, единством целей и интересов, взаимной ответственностью).
- Кооперативное обучение - это метод решения общих задач посредством взаимодействия небольшой группы участников (2-8 чел.). Групповая работа ориентирована на освоение следующих элементов кооперативного обучения (КО): а) положительная взаимосвязь между участниками, так как они понимают, что для выполнения задания они нуждаются друг в друге (каждый может выполнить ту задачу, которая для него наиболее понятна, и он в ней успешен или выполняет ту роль, которую ему предписывает группа, например, «докладчик», «отвечающий на вопросы») для выполнения общей цели; б) взаимодействие лицом к лицу (участники группы КО способствуют обучению, помогая друг другу, поощряя усилия, делясь знаниями. В процессе подготовки задания обучающиеся должны проговорить каждую часть задания); в) индивидуальные оценки (достижения каждого участника оцениваются друг другом и известны ему самому и его группе КО; преподаватель и однокурсники могут любому участнику задать вопрос); г) навыки межличностного общения (группа КО не может эффективно функционировать, если члены группы не имеют необходимых социальных навыков, поэтому преподаватель должен с первых занятий в русле здоровьесбережения формировать социальные навыки участников по принятию решений и ответственности, по разрешению конфликтов, по развитию лидерских качеств и толерантного отношения к друг другу; д) развитие группы КО (группы КО нуждаются в обдумывании качества работы и эффективности каждого участника, поэтому преподаватель просит однокурсников охарактеризовать работу группы и выделить достижения, неудачи, особенности работы, советы для улучшения работы). Рефлексивные упражнения формулируют сами студенты.
- Упражнения-энергизаторы - короткое упражнение, восстанавливающее энергию группы.

Второй модуль - это Интерактивные методы обучения. Мозговой штурм, метод который позволяет искать пути решения поставленной проблемы и продуцировать разнообразные идеи в соответствии с темами занятий.

Групповая дискуссия – специфическая форма беседы, организуемая преподавателем (или студентом при выборе темы), когда у участников на основании своих знаний и опыта имеются различные мнения по какой-либо проблеме. Студент, выполняющий роль ведущего побуждает к дискуссии всех участников, задает вопросы, выделяя общие точки зрения и наиболее важные позиции. Ведущий подводит итоги групповой дискуссии: сообщает объективную информацию по теме дискуссии, благодарит и отмечает наиболее значимые точки зрения.

Ролевая игра. Задача преподавателя - дать возможность испытать новые чувства, мысли, идеи; формировать эффективный способ поведения каждого участника группы в конкретной разыгрываемой им ситуации; определить поведение, которое нуждается в коррекции (например, непонимание); моделировать желательное поведение.

Организация и результаты экспериментального исследования
Organization and results of an experimental study

В 2015 году на базе Псков ГУ (факультет образовательных технологий и дизайна; направление подготовки «Социальная работа») проводилось исследование, направленное на становление субъектности студентов с первых дней обучения в вузе, что выражалось в понимании своей индивидуальности, осознанию ответственности за усиление собственного человеческого капитала. Технология «Дорожная карта» - алгоритм организации учебно-познавательной деятельности студентов на протяжении обучения в бакалавриате со спектром выборов индивидуальных маршрутов образования. Осмысление себя индивидуальностью с помощью «Дорожной карты» начиналось с того, что каждый студент понимал: один и тот же вопрос при подготовке к любому учебному занятию можно рассматривать под разными углами зрения (в связи с выбранной темой научного исследования или просто избранным для подготовки к занятию технологическим приемом в работе с литературой). В том, что собственные профессиональные интересы ориентируют каждого на особый выбор учреждений для прохождения разных видов практик за время обучения в вузе. Успешное профессиональное обучение во многом определяется выбором темы будущего дипломного проекта, материал для которого постепенно набирается от курса к курсу, от предмета к предмету. Так, если, например, студентом выбрана тема дипломного исследования «Социальная работа с многодетными семьями», то на 1 курсе набирается материал к 1 главе будущего диплома при изучении предметов «История социальной работы в России» (а он начинается уже в 1 семестре) и «История социальной

работы за рубежом» (2 семестр). На 2 курсе во втором семестре пишется первая курсовая работа по теоретическим основам социальной работы с многодетными семьями. И этому будет помогать предмет «Теория социальной работы», который изучается в течение всего 2 курса. Собранные в ходе написания этой курсовой работы материалы на 4 курсе помогут оформить вторую главу дипломной работы. А на 3 курсе параллельно изучению предмета «Технологии социальной работы» придется защищать курсовую работу «Технологии социальной работы с многодетными семьями». Материалы этой курсовой станут наряду с практикой, которая проводится в социальном учреждении, организующем работу с проблемами многодетных семей, основой для написания 3 главы будущего диплома. Кроме названных нескольких предметов будущему дипломному проекту будут помогать многие из предметов учебного плана и разнообразные виды учебных практик.

Сказанное выше с необходимостью обращает студентов к скорейшему определению темы будущего дипломного проекта. И тогда перед каждым студентом возникают с необходимостью те вопросы, ответы на которые ищет он сам уже в начале процесса обучения в вузе:

- о работе с какими получателями социальных услуг он будет много думать все эти годы;
- в каких учреждениях социального обслуживания пройдут его практики,
- какие учебные предметы в первую очередь соотносятся с темой его дипломного проекта;
- какие курсы по выбору наиболее значимы именно для него.

Чтобы более обдуманно совершить такой серьезный выбор, дорожная карта рекомендует советоваться с тем научным руководителем, который закрепляется за каждым студентом уже с 1 курса.

Усиливает внимание студентов к индивидуальному маршруту образования технология учебного проектирования, которая активно используется в ходе изучения дисциплины «Прогнозирование, проектирование и моделирование в социальной работе». Итогом изучения дисциплины является защита социального проекта по выбранной студентом теме в рамках темы дипломного исследования. Такая форма сдачи экзамена мобилизует знания студентов на решение проблемы, приобщает к научной работе.

Защита проекта проходит в форме ролевой игры. Вводная в игру: «Представьте себе, что вы – участники международного конкурса социальных проектов. Группа инвесторов готова профинансировать один из проектов. Ваша задача представить презентацию своего проекта».

Время на защиту – 5-7 минут.

Положения, выносимые на защиту:

1. Название проекта.
2. Социальная проблема, на решение которой направлен проект.
3. Актуальность решения данной проблемы для местных условий, использование имеющегося опыта решения подобных проблем в социальной практике и его применение в проекте.
4. Цели и задачи проекта.
5. Сроки реализации проекта.
6. Целевая группа проекта.
7. Инновационность проекта:
   - краткое описание сути нововведения;
   - степень новизны нововведения (абсолютная; относительная – местная, частная, условная);
   - применяемость инновации к конкретным условиям (локализация по месту, времени и ресурсам).
8. Ожидаемые результаты от реализации проекта.
9. Бюджет проекта (общая сумма проекта).

В ходе защиты остальные студенты готовят экспертное заключение на социальный проект.

Содержание экспертного заключения:

1. Актуальность проекта:
   - для решения социальной проблемы в общей практике социального управления;
   - для решения конкретной социальной проблемы на локальном уровне.
2. Конкретность и реалистичность заявленных целей и задач.
3. Оценка предполагаемого в проекте нововведения:
   - положительные стороны;
   - недостатки.
4. Предложения по ликвидации замеченных недостатков.
5. Общий вывод о возможности реализации проекта в социальной практике.

Эта форма экзамена, как показала практика, интересна студентам. Важной особенностью использования технологии проектирования в учебном процессе является практическая реализация разработанных социальных проектов в рамках выпускных квалификационных работ.

Приведем пример социального проекта «Талант в каждом», разработанный студенткой выпускного курса направления подготовки «Социальная работа» в рамках темы дипломного исследования и

реализованного на базе Центра лечебной педагогики и дифференцированного обучения г. Пскова. Целью проекта было развитие творческого потенциала детей с детским церебральным параличом и умственной отсталостью средствами арт-терапии. Особенностью данного проекта явилось то, что разработанные студенткой методики в работе с детьми с ДЦП в сочетании с умственной отсталостью были направлены не на коррекцию имеющихся недостатков, а на развитие творческого потенциала этих детей средствами арт-терапии с упором на внутренние ресурсы, которые заложены в каждом ребенке с таким диагнозом.

Философия проекта: каждый особый ребенок талантлив особенно.

Важно, чтобы в ходе работы инициатива исходила от детей, а потому задания носили индивидуально-ориентированный характер.

Суть методики:

- ориентация на тот потенциал, который заложен в каждом ребенке;
- создание ситуации успеха для каждого;
- в организации занятий учитывать интересы и потребности ребенка, а не действовать по стандартным методикам;
- пробуждать интерес ребенка к занятиям через создание образов, музыки, цвета.

Итогом данного проекта стала организация выставки творческих работ детей на базе Псковского государственного университета, целью которой стало не только демонстрация творческих работ детей с ДЦП, но и формирование толерантного отношения к таким детям.

Таким образом, результаты такой работы показывают, что социальное проектирование в ходе организации социально-преобразующей деятельности повышает не только социальную активность студентов, но и способствует успешному развитию креативности личности.

В ходе всего процесса обучения студентов в вузе используются здоровьесберегающие технологии, усиливающие ответственность студентов за качество собственной жизни и внимание к здоровью окружающих.

Реализация идей здоровьесберегающих технологий в образовательном пространстве вуза появилась из проекта «Обучение здоровью в образовательных учреждениях Российской Федерации», который финансировался Европейским союзом и являлся частью программы ТАСИС, был реализован Финляндией и Германией. Главный партнер проекта - Министерство образования РФ, а также Министерство здравоохранения РФ. Проект реализовывался в период с 2003 по 2005 г.г. в 4 пилотных регионах: Республика Татарстан, Республика Чувашия, Псковская и Ростовская области. Партнерами и участниками проекта в

регионах являлись управления образования и здравоохранения, школы, лицеи, педагогические и медицинские ВУЗы, лечебно-методические и оздоровительные центры. Вузы включились в освоение здоровьесберегающих технологий на последнем этапе. Главная цель проекта: укрепление здоровья детей и подростков путем разработки комплексного подхода к обучению и воспитанию на основе реализации программ по укреплению здоровья в образовательных учреждениях РФ. Главная идея проекта - объединение усилий педагогов, медиков и управленцев всех уровней для создания условий, способствующих сохранению здоровья молодежи в образовательных учреждениях.

В рамках освоения здоровьесберегающих технологий были разработаны: базовая образовательная программа методического обеспечения здоровьесберегающей среды учебного заведения и учебно-методический комплекс «Методологические элементы обучения здоровью в образовательных учреждениях» по освоению здоровьесберегающих технологий (Кириков, 2011).

Конечно, это позволило не только осмыслить методологию здоровьесберегающей педагогики, освоить технологию превентивного обучения, но и внедрить идеи технологии здоровьесбережения в образовательное пространство в вузе в учебный процесс при проведении занятий со студентами различных специальностей (иностранных языков, физико-математическом, филологическом, образовательных технологий и дизайна).

Экспериментальная работа по реализации идей здоровьесберегающих технологий в учебный процесс осуществлялась на занятиях со студентами педагогических специальностей различных факультетов (иностранных языков, физико-математическом, филологическом и др.) и на факультете образовательных технологий и дизайна. Идеи здоровьесбережения обучающихся реализовываются через следующие задачи:

- снизить тревожность у студентов первого курса;
- мотивировать их к ответственному отношению к себе, способствовав развитию самосознания, самооценки;
- активизировать собственные усилия на саморазвитие в освоении особой профессиональной деятельности «учитель»;
- развить толерантное отношение к чувствам, представлениям, интересам и желаниям других относительно образа жизни и здоровья;
- изменить традиционный взгляд на учебный процесс, чтобы понять ответственность учителя за сохранение и укрепление физического, социального и ментального здоровья своих будущих учеников.

В учебном процессе реализация задач осуществлялась через освоение модулей здоровьесберегающих технологий:

Первый модуль – Методология превентивного обучения:

- Групповая работа. Семинарские большие группы были разделены и работали малыми творческими группами (группы создания команды, обучения или личностного роста). Например, творчески и без особых трудностей при групповой работе проходит освоение таких тем как: педагогическое общение, закономерности и принципы воспитания и социального воспитания и др. При анализе семинаров (рефлексия) участниками отмечались положительные личностные изменения, связанные с самооценкой, пониманием изучаемого.
- Кооперативное обучение. Выполнение творческих групповых заданий в процессе обучения: появилась положительная взаимосвязь между участниками, взаимодействие лицом к лицу, осуществляются индивидуальные оценки, осваиваются навыки межличностного общения. Рефлексивные упражнения формулируют сами студенты.
- При проведении упражнений-энергизаторов, каждое занятие (лекция, практическое или семинарское) начиналось упражнением– энергизатором и заканчивалось упражнением на рефлексию. В начале занятия, упражнения выполняли различные функции: на первом курсе для знакомства и для сплоченности только что сформировавшейся группы; для разминки, расслабления и оживления активности участников, для развития у участников коммуникативных навыков, привлечение внимания участников к теме занятия и др. Необходимо отметить, что сегодня в практике работы преподавателя студентам предлагается самостоятельный подбор (поиск) и проведение упражнений-энергизаторов. Вот некоторые упражнения, предложенные и проведенные студентами в процессе занятий: «Сегодня меня обрадовало … и сегодня меня огорчило…», «Я благодарю тебя за …» и многие др. Данные упражнения позволили сформировать положительную психологическую атмосферу на занятиях и в группе, что является еще одним элементом данного модуля.

Второй модуль - это интерактивные методы обучения. Например, при реализации метода мозгового штурма использовались управленческие кейсы по проблемам текучести кадров, мотивации трудовой деятельности, особенности организационной культуры и др. Студенты оказывались вовлеченными в учебный процесс, активизировался творческий потенциал.

При групповой дискуссии студент, например, студент первого курса в рамках курса «Социальная педагогика» самостоятельно выбирает, формулирует, предлагает для обсуждения в форме видеоролика социально-педагогическую проблему (детский суицид, обучение и воспитание слабослышащих детей, детское насилие и жестокость, нравственность и проблема абортов и др.).

Ролевая игра**.** Ситуации с ролевыми играми позволили практико-иллюстративно увидеть различие, например, в стилях педагогического общения между учителем и учеником, выявить особенности личности сокурсника и др. Например, когда обучающиеся осваивают новые понятия темы «социальное воспитание», «социальное обучение», «социально-педагогическая деятельность» с помощью несвойственных для них игровых ролей через задание: «Выстроить скульптуру из взаимосвязанных предложенных осваиваемых понятий». Задача преподавателя - дать возможность испытать новые чувства, мысли, идеи; формировать эффективный способ поведения каждого участника группы в конкретной разыгрываемой им ситуации; определить поведение, которое нуждается в коррекции (например, непонимание); моделировать желательное поведение (Цветанова-Чурукова, 2014).

Приемы, методы, упражнения здоровьесберегающих технологий качественно меняют учебный процесс: меняется структура занятия, улучшается психологическая атмосфера в группах, выстраивается взаимодействие, общение, понимание, например, в только что сформировавшихся группах первого курса.

Обобщение
Conclusions

Таким образом, рассмотренные современные образовательные технологии становятся действующими условиями успешной реализации индивидуальной образовательной программы студентов в образовательном пространстве вуза. «Дорожная карта» помогает переходу студента к состоянию субъектности и осмыслению собственного маршрута образования в вузе. Социальное проектирование позволяет улучшить окружающую жизнь, повысить социальную активность студентов, вывести социальное творчество на новый уровень развития. Благодаря социальному проектированию студенты обучаются социальному действию и взаимодействию в совместной социально-преобразующей деятельности, а также в освоении, изучении студентом социального пространства, развитии социальной и проектной компетентности.

Здоровьесберегающая технология позволяет организовывать процесс обучения без ущерба здоровью обучающихся и педагогов: снижается тревожность у студентов первого курса перед новыми требованиями учебного процесса, развивается ответственное отношение к себе и к сокурсникам, развивается самосознание и самооценка, активизируются собственные усилия на саморазвитие, развивается толерантное отношение к чувствам, представлениям, интересам и желаниям других относительно образа жизни и здоровья, изменяется взгляд на учебный процесс с позиции ответственности педагога за сохранение и укрепление физического, социального и ментального здоровья обучающихся.

Summary

The article deals with the problem of removing contradictions between the necessity of the higher school to implement the individual educational route of the student and insufficient attention of teachers to the selection of appropriate educational technologies.

The aim of the study was to study the possibilities of modern educational technologies to strengthen the student's individuality, subjectivity and human capital. Such research methods as theoretical analysis and synthesis of materials on the problem of studying, generalization, discussion, conversation were used.

The conclusions of the study is the position: the considered educational technologies are able to Orient the educational process to the development of human capital. They allow to actualize personal meanings of educational activity of students; to increase their social activity; to strengthen orientation of students on self-development from the point of view of preservation of health.

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THE PHYSICAL COMPETENCE OF FUTURE TEACHERS AS AN INPUT TOWARDS THE QUALITY OF THE PEDAGOGICAL ACTIVITY CONCEPT

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Abstract. *The indicators of physical competence in scientific research studies and normative documents of education systems are defined differently. However, the consolidation of research evidence confirms that in this area the knowledge and skills of the person imply taking responsibility for health and well-being of one's body, motoric skills, and ability to regulate and physically adapt to the surrounding environment.*
Undoubtedly, the family plays a major role in the development of children's physical competence. At the same time in this context the input of educational programmes is significant together with the individual physical competence of a teacher and his/her understanding about how to ensure its quality in one's own work and in the concept of educational system.
The aim of the research reflected in this publication is to analyse the physical competence of the students of Teacher Programmes as a resource for the development of the concept of their further pedagogical work. For this purpose, the emerging teachers have been surveyed using the methodology developed by Corbin et al. (2008). For statistical analysis of the research data the SPSS 22.0 programme was employed: a method of descriptive statistics, Kruskal-Wallis test, and Kendall's tau-b correlation test.
Keywords: *physical competence, physical activities, dietary habits, pedagogical concept.*

Introduction

The findings and data presented in this publication are part of a broader study devoted to the problem of healthy lifestyle development for children and young people. The research initiative is based on analysis of two interrelated trends: the deterioration of the health status of children and young people and the support provided by the education system to overcome these problems.

The research field reflected in this publication is internationally significant already for a long time. It is reflected, for example, in the report of World Health Organization (WHO) which states that in most countries the major risk factors

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accounting for a significant proportion of all deaths and disease are overweight and obesity and physical inactivity (WHO, 2002). In 2003, WHO Global Strategy on Diet, Physical Activity and Health is issued for guiding activity development at local, national and international levels in this way intending to reduce the risk factors related to diet and physical activity in populations (WHO global strategy on diet, physical activity and health, 2003).

The problem of implementing a healthy lifestyle has maintained its topicality up to today. This is evidenced by the strategic priorities of both WHO and UNESCO, which state that all children and young people must have access to safe, inclusive, health-promoting learning environments. Therefore, school policies and programmes should support the adoption of healthy diets and physical activity through nutrition education, nutrition programmes in schools, inclusive physical education and creating a supportive environment (WHO, 2016; UNESCO strategy on education for health and well-being, 2016).

The above mentioned tendencies also influence the strategic planning of Latvian social environment and education system development. At present, in the National Development Plan for 2014-2020, Strategic objective “Healthy and fit for work" it is emphasized that one of the priorities is to strengthen healthy lifestyle in society as a whole supporting health promotion networks through: (1) promotion of healthy nutrition, active lifestyle and mental health (2) development of children's and youth sports and national sports, (3) inclusion of health education in school curricula, (4) prevention of addictive substances and processes (Latvijas Nacionālais attīstības plāns 2014.-2020. gadam, 2012: 46.–48.).

Policies determine that pedagogical concepts of educational institutions should promote good nutrition and physical activity through strengthening school links with nutrition, youth, sports and other relevant programmes and with communities.

One of healthy lifestyle aspects is physical competence. It includes knowledge and skills related to the promotion of healthy lifestyle. In this regard, for example, in the Public Health Review of United Kingdom (Gatineau &Den, 2011), analysing the dietary and physical activity habits in England, the authors conclude that the knowledge and attitude are the key elements in the development of a positive health behaviour.

Sometimes the physical competence is defined as one's overall perception of personal physical abilities. Thereby perceived physical competence is a subjective perception of physical abilities, and these perceptions may or may not coincide with the actual ability. Perceived physical competence is considered to be the more as a global construct of physical self-efficacy, therefore it is considered to be the people's overall perception of their general physical abilities on physical tasks (Bell, 1997; Hänsel et al., 2016). Similar understanding of physical

competence is revealed also through concept of physical literacy, which implies motivation, confidence, physical competence, knowledge and understanding of the value of taking responsibility for the engagement in physical activities for life (Canada's physical literacy consensus statement, 2015).

In the broader view, the structure of physical competence includes (1) taking responsibility for personal health and well-being of the body, (2) motor skills, abilities, (3) ability to physically adapt to the environment (Der Bayrische Bildungs- und Erziehungsplan, 2006).

Similar approaches related to the structure of pupils' physical literacy are also included in the strategic planning documents of educational content in Latvia. In this context physical literacy involves: (1) learning the key movement skills; (2) a person's responsible involvement in a variety of physical activities that promote health and life skills; (3) acquiring skills for planning and evaluating new and creative physical activities and events, promoting mental and physical abilities; (4) ability to demonstrate leadership and collaboration skills by working in groups or teams (Vīzija par skolēnu kādam tam jābūt, 2017).

Consequently, a complete picture of healthy lifestyle and physical competence is needed for both qualified and emerging teachers, which could serve as a basis for further professional activity in the field of education.

Taking into account the urgency of the healthy lifestyle implementation issues, the aim of this study is to analyse the physical competence of the students of teacher programmes as a resource for developing the concept of further pedagogical activity.

The following research questions have been put forward:

Research Question 1: Which indicators form the structure of future teachers' physical competence?

Research Question 2: How are the skills, which contribute to the quality of the pedagogical concept in conjunction with the development of physical competence, demonstrated?

The questionnaire developed by C. Corbin (Corbin et al., 2008) is employed in this study emphasizing two of the basic healthy lifestyle and physical competence components – physical activity and dietary habits.

Methodology

The research context

As previously indicated, the data summarized in this study is part of a broader research devoted to the issues of healthy lifestyle development for children and young people. The research initiative is based on the data collected in Latvia, which testify the restrictions of physical competence development for children and young people in different age groups.

In this regard, the data from the study on sports habits of Latvian people confirm that in 88 % of cases the pupils aged 6-13 engage in sports activities as well as attend various art or interest related classes. Accordingly, 95 % of adolescents aged 13-17 are engaged in sports. However, only 5 % of representatives of this group participate in these sports activities on average once a week (Slimību profilakses un kontroles centrs, 2012).

The data on sports habits of Latvian youth reveal comparatively controversial indicators. The survey results show that young people, age 13-25, mostly spend their spare time passively: 64 % - on the computer, 40 % - watching television programs, 30 % - reading. On the other hand, participation in sports activities is confirmed by 53 % of respondents (Slimību profilakses un kontroles centrs, 2014).

The analysis of data on the health status of children and adolescents in 2016 confirms that 34.5 % of the first-grade pupils and 36.5 % of adolescents fall under the 2nd health group, which is characterized by, for example, developing threats of chronic diseases and functional disorders. Approximately 3.5 % of children and adolescents in each age group comply with the 3rd health group characterized by a decompensatory stage, hereditary organ or system pathology, functional pathology and weight disorders. In addition, the posture problems are diagnosed for 13.9 % of the first graders and 15.4 % of the 1,000 examined cases (Central statistical bureau of Latvia, 2017).

In 2016, in the context of students' understanding of a healthy lifestyle, summarizing the questionnaire data in the group of student respondents (N = 129) it is concluded that 88.5 % of respondents have to change their dietary habits and that the physical activity of students is insufficient. Students see the following obstacles for implementation of a healthy lifestyle: laziness and the lack of willpower - 68.4 %, the rapidness of life's rhythm – 49 %, the lack of finances - 34.7 %, the lack of support from surrounding people - 33.7 %, harmful habits - 19.4 %, insufficient knowledge - 10.2 %, stress – 5 %, diseases - 5.1 % (Vecenāne, 2016).

Participants

The respondent group for this research consists of Liepaja University students – future teachers (N = 186) taking into account their different age, chosen field and experience. From all respondents 87.6 % are female and 2.4 % - male. The age of respondents: 18-25 y/o - 55.4 %, 26-35y/o - 18.8 %, 36-45 y/o - 17.7 %, 46-55 y/o - 7.5 %, and 0.6 % of respondents older than 55 years. The respondents are majoring in different fields: basic education teacher - 34.8 %, pre-school teacher - 28.5 %, sports teacher - 12.4 %, special education teacher - 8.1 %, music teacher - 4.3 %, history teacher - 3.8 %, and 8.1 % of the respondents have not specified their field.

Research procedure and design

This study employs a questionnaire developed by C. Corbin (Corbin et al., 2008) integrating two indicator systems related to the individual's physical activity and dietary habits (Cronbach's Alpha = 0.778). The questionnaire consists of twenty questions. For the research purposes the two groups of indicators are set apart: (1) indicators characterizing the structure of physical competence of future teachers (research question 1), (2) indicators that confirm the respondent's skills to contribute to the quality of the pedagogical concept in conjunction with the development of physical competence (research question 2).

In relation to the structure of physical competence of future teachers, the following indicators have been assessed: (1) skills to regularly assess one's own physical fitness and dietary habits; to make regular records on physical activity and dietary habits; to set realistic goals for improvement of physical fitness and dietary habits; to develop a personal program for ensuring physical activity and healthy eating; (2) attitudes about engaging in sports activities and using a healthy diet while overcoming the obstacles; (3) abilities to ensure regularity in the perfection of physical competence.

Accordingly, keeping in mind the potential contribution of future teachers, the respondents' knowledge of the veracity of public information and their ability to involve other people in physical activity and healthy dietary habits have been assessed.

The publication summarizes the data acquired during the period of 2016 – 2018. For statistical analysis of the research data, the SPSS 22.0 programme was employed: a method of descriptive statistics, Kruskal-Wallis test, and Kendall's tau-b correlation test.

Findings

Analysing the data obtained in this research, the percentage of responses was calculated for each group of indicators.

Table 1 **Indicators of respondents' physical competence**

Indicators	Average value (Mean)	%		
		No	Partly	Yes
Physical activities	1.792	42.7	35.3	22.0
Healthy dietary habits	1.681	48.3	35.3	16.4

Here it can be added that the self-evaluation is higher for respondents who are involved in physical activities. In addition, the maximal significant differences

(p = 0.000) are observed in relation to respondents' gender: the self-evaluation of males is higher than the one of females (Mean Rank 892.32).

With regards to the implementation of movement activities there are also significant differences (p = 0.005) observed related to the age of respondents: the highest self-evaluation is for respondents aged 26 - 35 (Mean Rank 783). Accordingly, the lowest self-evaluation is for respondents over the age of 55 (Mean Rank 609.00).

The maximal significant differences (p = 0.000) are also found in relation to the chosen specialization: the lowest self-evaluation is for emerging history teachers (Mean Rank 687.84) and pre-school teachers (Mean Rank 693.76), but the highest – for future sports teachers (Mean Rank 1006.61).

The statistical data analysis of indicators related to healthy dietary habits revealed significant differences in terms of age (p = 0.023): the self-evaluation is higher for respondents aged 26-35 (Mean Rank 209.03), but lower for respondents aged over 55 (Mean Rank 137.50). In addition, there are also significant differences related to the chosen speciality (p = 0.050): the self-evaluation is higher for primary school teachers (Mean Rank 191.25), but lower for pre-school (Mean Rank 172.77) and special education teachers (Mean Rank 172.13).

The more detailed data analysis confirms the proportion of certain individual components in the structure of physical competence of respondents.

Table 2 **The structure of physical competence of respondents**

Indicators		***%***		
		No	**Party**	**Yes**
Physical activities	Skills	43.5	34.5	22.0
	Attitudes	41.9	34.4	23.7
	Abilities	40.3	41.4	18.3
Healthy eating habits	Skills	54.5	30.9	14.6
	Attitudes	40.9	40.3	18.8
	Abilities	32.3	47.3	20.4

The statistical analysis of data on implementation of physical activities shows maximal significant differences (p = 0.000) with regards to gender in assessment of both skills and attitudes: in both cases the Mean Rank is higher for male (542.99 and 241.28) than for female (454.57 and 178.77) students. Accordingly, the maximal significant differences (p = 0.000) can be observed in assessment of skills with regards to age: the highest self-evaluation is for respondents aged 26-35 (Mean Rank 494.52) and 18-25 (Mean Rank 484.39), but the lowest – for respondents aged over 55 (Mean Rank 272.60). In contrast, the maximal significant differences (p = 0.000) are determined also with regards to specialization when assessing skills and attitudes: the highest evaluation comes

from future sports teachers (Mean Rank 607.73) and music teachers (Mean Rank 553.03), but the lowest – from history teachers (Mean Rank 431.81). Accordingly, when evaluating the attitudes, the highest score is for sports teachers (Mean Rank 280.07), but the lowest one for pre-school teachers (Mean Rank 165).

Data analysis in relation to healthy dietary habits identifies significant differences with regards to respondents' age when assessing their skills ($p = 0.002$): the highest score is for respondents aged 46-55 (Mean Rank 518.23) and 25-35 (Mean Rank 515.44), but the lowest – for respondents over 55 (Mean Rank 333.40). Assessing the attitude, the highest rating is for respondents of age 25-35 (Mean Rank 221.27) and 46-55 (Mean Rank 207.93), but the lowest for respondents over the age of 55 (Mean Rank 76.50). Assessing the abilities, the highest score is observed for respondents of age 46-55 (Mean Rank 121.71), and respondents of age over 55 (Mean Rank 30.50). Significant differences ($p = 0.045$) were also found with regards to the chosen speciality: the highest evaluation for skills comes from emerging music teachers (Mean Rank 570.86), followed by history teachers (Mean Rank 396.90).

Regarding the potential contribution of the respondents to the pedagogical concept, the indicators are summarized about respondents' knowledge regarding the veracity of publicly available information, as well as about the ability to involve the other people in physical activities and in formation of healthy dietary habits.

Table 3 **Indicators of respondents' knowledge**

Indicators	%		
	No	Partly	Yes
Physical activities	33.0	46.0	21.0
Healthy dietary habits	33.6	46.5	19.9

The statistical analysis of data in relation to physical activity shows the maximal significant differences ($p = 0.000$) with regards to respondents' gender: the self-evaluation of male students is higher (Mean Rank 234.86) than for female students (Mean Rank 179.68). The differences are evident also for the indicators in relation to the respondents' specialization: the highest self-evaluation is for future sports teachers (Mean Rank 246.17) and music teachers (Mean Rank 218.94).

Accordingly, in relation to the potential influence on the development of healthy dietary habits of other people, the significant differences were observed with regards to respondents' age: the highest self-evaluation is for respondents aged 26-35 (Mean Rank 209.03), but the lowest for respondents over 55 years of age (Mean Rank 137.50). In turn, with regards to respondents' specialization, the

highest self-evaluation is for future music teachers (Mean Rank 255.13), the lowest for teachers of special education (Mean Rank 172.13).

Discussion and conclusions

The research data on student's physical competence indicates insufficient competence of students when implementing physical activity and healthy dietary habits, which are the most important components of a healthy lifestyle. Scientists from around the world, such as the American team of researchers (Yahia et al., 2015), have similar research data on physical fitness of students concluding that physical activity, students' knowledge about healthy and unhealthy dietary habits, and nutritional knowledge need improvement, and saying that developing of gender-specific programs for promoting healthy lifestyle behaviours among students is recommended. Iranian scientists (Rahmati- Najarkolaei et al., 2015) conclude that the student's knowledge of the benefits of a healthy lifestyle is desirable as living in academic settings and preparing for exams that trigger stress, reduce healthy nutrition patterns and physical activity, which are the two factors associated with life quality. Therefore, the planning and evaluation of environmental health promotion interventions are proposed.

The research of another group of Iranian scientists (Azizi et al., 2011) have found that there was a positive and significant correlation between the nutrition knowledge and attitude of the female (r= 0.001; sig= 0.03) and male (r= 0.30; sig= 0.03) students; and a positive and significant correlation between the nutrition attitude and practices of male and female students (r= 0.18; sig= 0.000). The researchers suggest that students should pay more attention to nutrition issues, and that the time students spend at college is suitable for learning and thus can promote nutrition knowledge and shape the attitude and practices of students. Therefore, the importance of nutrition in various college curriculums and improvement of the learning environment related to nutrition need to be emphasized on college campuses.

Previous research studies in Latvia in this field (Vecenāne, 2016) suggests that statistically reliable correlations ($p < 0.05$) were found between positive self-evaluation of students' knowledge and positive changes in physical activity habits. In turn, such statistically significant correlations have not been established between student’s self-evaluation of their knowledge and their eating habits.

The results of our research show that, according to students’ self-evaluation, the physical activity competence is insufficient for 42.7 % of students, for 35.3 % it is partially sufficient, but sufficient for 22.0 % of respondents. In turn, 48.3 % of students lack the competence of healthy dietary habits, it is partially satisfactory for 35.3 %, but sufficient for 16.4 % of students. In addition, the self-evaluation

scores of male students are higher, which may be related to a small percentage of male respondents. The lowest self-evaluation of physical competence is in the age group after 55, which could indicate the self-critical attitude of the respondents of this age group, and it may become a research question for another study. Data analysis shows a high self-evaluation of physical competence of emerging sports teachers, which of course is related to their specialization; however, the high self-evaluation of music teachers in terms of their skills and attitude in comparison to other teacher specializations invites for researching deeper the relationship between a particular specialization and physical competence, as well as involvement of its stimulating factors in pedagogical practice.

Changes in the education system of Latvia impose new requirements for teachers, and a competence approach has been introduced for the implementation of learning content, which emphasizes the promotion of pupils' health and physical activity (Vīzija par skolēnu kādam tam jābūt, 2017). Therefore, the physical competence for health promotion is required not only for sports teachers, but for teachers of all specialities because it is related to 1) teachers' own health and work capacity, and also quality of life; 2) interactions between the teachers and pupils which in turn promote the pupils' physical competence development.

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HIGHER EDUCATION IN TOURISM FROM THE PERSPECTIVE OF THE LATVIAN TOURISM INDUSTRY

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Abstract. *Several Latvian higher education organisations provide both academic and professional study programmes in tourism from college up to master level. Frequently educators stress that programme's content corresponds to tourism industry needs; however, tourism representatives describe higher education as reactive to the needs rather than proactive. The aim of the study is to explore tourism labour market needs in Latvia and to analyse the employability of graduates and the quality of higher education from the perspective of tourism sector stakeholders in the state and municipal, non-governmental and private sectors. Interviews with informants from small and medium size organizations were selected as data collection method and data were coded and analysed by using the method of content analysis. Results reveal that cooperation between higher education institutions and the tourism sector is insufficient as education partially responds to the needs of the industry. The industry stakeholders suggest strengthening students` skills in sales, cooperation and networking and creative experience design. A data analysis reveals that personal traits and self-efficacy play a more significant role than formal education in the process of staff recruitment. Tourism educators should engage in closer cooperation with the tourism sector to find out needs proactively, reconsider study methods and use a more hands-on approach – improvement of the supply of education does not demand fundamental study content changes but rather transformation of study methods – assessing the effectiveness of existing methods and introducing novel teaching ways.*
Keywords: *study content, higher education, skills, tourism.*

Introduction

Globally, the supply of higher tourism education has developed rapidly as a major platform for human capital development for the tourism sector in the last decades (Ladkin, 2005). Knowledge and experience of human resources strongly affect professional performance (Perman & Mikinac, 2014), and it makes skilled and competent human resources the most important factor for the development of competitive tourism products and destinations. Continuous fundamental changes in most fields and industry clusters have influenced what qualities employers demand and expect from graduates. In practise, employers frequently are not

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satisfied with the supply of the labour market and skills gaps, and the issues of employability have been at the focus point of academic studies and industry reports in different sectors of the economy (Cinque, 2016; Regalado-Pezua & Montoya Bayardo 2012).

Overall, tourism educators face a major challenge to identify and meet the needs of the tourism industry, specifically if skills gap in tourism appears to be more pronounced in comparison to the other sectors of the economy. For example, Regalado-Pezua & Montoya Bayardo (2012) argue that neither the tourism industry is satisfied with the labour market nor universities with the placement of students. There are proofs from Spain of much higher incidence of over-education in the tourism labour market than in the rest of the economy (Lillo-Bañuls & Casado-Díaz, 2015). An industry labour market report (Expert group on future skills needs, 2015) mentions budget cutbacks as one of the reasons why educators sometimes are unable to provide training in practical skills.

There is a strong consensus that stakeholders should be increasingly integrated in tourism education to ensure effective training of students. Many studies and reports focus on cooperation between higher education institutions (hereinafter HEI) and the tourism industry (e.g. Wang et al., 2010; Regalado-Pezua & Montoya Bayardo, 2012) indicating that even well- established systems face some problems. The employability of graduates of higher education in tourism is a combination of many factors such as quality of cooperation, specifics of the national education system, budget, a number of students, labour market demand etc.

The focus of the research study is on tourism labour market demand in the context of higher education supply - the notable growth of tourism higher education study programmes in Latvia in the past 20 years has not eliminated uncertainties about the outcome of higher education in tourism and it is a frequently asked question - how higher education study programmes meet to the needs of the tourism sector.

The aim of the study is to explore tourism labour market needs in Latvia and to analyse the employability of graduates and the quality of higher education from the perspective of tourism sector stakeholders. Representatives from the state and municipal, non-governmental and private sectors participated in semi-structured interviews. The interview data were analysed by using the method of content analysis. It is important to stress that in practice industry representatives rarely operate with term ‘skills’, so we used the same term in order to classify the results.

Literature review

The tourism industry is represented by a wide range of stakeholders whose perception about employees’ skills and competences has been explored mostly in

sub-sectoral context. Studies reveal considerable variance in views regarding the supply of education among industry professionals, academics and other stakeholders. However, stakeholders should agree on education quality, the quantity of graduated students, national occupational standards, trainers and qualification development, followed by discussions about funding (British Council, 2015; Stabback, 2016).

Balancing views of industry professionals, academics and other stakeholders is a challenging issue, specifically if the needs of the labour market fluctuate constantly. Some of the factors causing fluctuation are: (1) fast development of technology increases the need to market and serve customers online, to care about customers` personal data, to use technologies to enhance customer experience and maximise business opportunities etc.; (2) changes in consumer demand; (3) social and demographic changes; (4) environmental changes etc. (Williams et al., 2012). Under the pressure of changes, employers look for a flexible workforce being able to adapt to the fast changing tourism business environment.

Another topical discussion refers to the ability to balance the vocational and liberal aspects of tourism education. Future tourism professionals should be not only broadly educated, knowledgeable, and responsible but also occupationally functional in tourism. Concentrating exclusively on the vocational education impoverishes students and render them less likely to be able to respond to the demand by tourism stakeholders. (Lewis, 2005; Inui et al., 2006) Wang et al. (2010) also defend the balance of theory and practice by suggesting that tourism higher education provision should not be isolated from real practice.

Previous studies have generated lists of knowledge, skills and competences demanded by sector of the economy, categorized them in different ways (e.g. Cinque, 2016; Wilks & Hemsworth, 2011; Zehrer & Mössenlechner, 2009) but in general there is a consensus - in the past there were stronger focus on demand-led skills, while nowadays a trend is as follows: the "*holistic view of 'graduate attributes' include 'softer' transferable skills and person-centred qualities, developed in conjunction with subject specific knowledge, skills and competencies*." (Cole & Tibby, 2013: 9) Authors (Wilks & Hemsworth 2011; Tsitskaria et al., 2017; Cinque, 2016; Stacey, 2015) report on increased significance of soft skills to ensure career and effective performance both in tourism and in other sectors of the economy.

Labour market mismatches are defined as "*the gap between labour demand and labour supply characteristics. They can occur at different levels: regions, sectors of activity, skills and so on*" (Dimian et al., 2017: 17). The issues of study programmes in tourism, the shortage of cooperation among HEI and other stakeholders do not explain a full spectrum of the reasons behind the skills gap. For instance, in Ireland 50 % and more of respondents - business stakeholders - mentioned that very significant or significant reasons behind the skills gap were:

(1) insufficient numbers of people with appropriate training and the right level of experience; (2) skilled staff was available but had no interest to take an offered work position; (3) skilled staff was too expensive to be hired (Expert group on future skills needs (2015). Professional training for individuals already working in the sector is related to the organizations` will and capacity to provide training for the staff. Not all organizations consider costs of employer training as investment in future, specifically among SMEs (Expert group on future skills needs (2015). Williams et al. (2012) indicate staff also can have a lack of motivation to learn or even if training is provided, the improvement of performance is not sufficient. The previous studies of tourism labour market needs in different countries report that understanding among stakeholders is not coherent regards skills gaps and that not everybody understands the significance of training and re-training. Consequently, some stakeholders might expect too much from HEI - e.g. graduates with ideal skill set for specific occupations in the tourism sector.

Ahmad (2015) argues over the current focus and that the process of tourism and hospitality study programmes is too mechanistic and does not promote or encourage entrepreneurial behaviour. Lourenço & Jayawarna (2011) stress the need to rethink the pedagogical approaches used in classes in order to promote the development of non-cognitive skills, such as proactiveness, creativity, leadership along with the development of attributes, techniques and experiences to help students get ready to enter the labour market. The industry proposes to enable a cross-disciplinary and user-centred approach in studies to improve impact on students' motivation to enrol in activities proposed by professors, as well as to create an atmosphere that is favourable to learning, and where the students play an active role in gaining, which is in line with previous studies (Daniel, 2016).

Research methods

Semi-structured individual and group interviews were organized to obtain the opinions of tourism stakeholders from February to April, 2017. The questions included the following main themes: meaningful factors in choosing a new employee; competences personally needed to improve (or acquire) to foster the development of one’s organization; recent professional training strategy; the perception of strengths and challenges of a region as a tourism destination; other questions related to the employability of graduates and students during their internships. The informants were selected from all the sectors – the non-governmental sector (hereinafter NGO), the private sector, the state and a municipality thematically representing different fields in the tourism industry as hospitality business, destination marketing, tourist sites etc. Upper and medium level managers, owners, marketing and public relation specialists were asked to

participate in the study. All together 44 interviews took place (informants n = 53). Interviews were done until data reached a saturation point. The data were gathered within the INTERREG Central Baltic Region project "Boosting Tourism Business Growth Through Higher Vocational Education" and Latgale region was not included in the programme. The data represented small-sized tourism stakeholders in Vidzeme, Zemgale, Kurzeme and Riga.

Interviews were transcribed, coded and analysed by using qualitative content analysis. The literature review of previous studies presents different approaches to categorization of the skills and competences needed in tourism and the hospitality industry labour market. During the data analysis process, previously defined frameworks of skills were not applied - we allowed the data themselves drive the process of categorization, so that the data would reflect the specific context of the Latvian tourism industry and education. The data were reviewed and grouped into categories through open coding (Strauss and Corbin, 1990). The aim of grouping data was to reduce the number of categories by collapsing those that are similar or dissimilar into broader higher order categories. Domains describing the relevant skills and knowledge needed for educating future tourism professionals to contribute to the tourism industry growth and competitiveness emerged from the data. The skillset was expressed repeatedly by the informants and each category was named by using content-characteristic words.

Along with a qualitative content analysis, the frequency count was implemented.

Study results

Study results indicate several areas of concern deepening the skills gap in the Latvian tourism labour market from the perspective of tourism sector stakeholders. The findings were categorised around two large themes - one of them describes personal attributes and other domains of skills. The domains consist of a variety of attributes indicating the shortage of specific skills and competences in Latvian tourism. Some of the domains are cross-sectoral (e.g. ICT, networking) and appear in different contexts of needs.

The most significant **personal attributes** identified in the research were self-efficacy, motivation to work and learn, general erudition, specifically in geography, history, culture, and art, also creativity, positive thinking, quick reaction and physical fitness were mentioned as significant. Frequently, the role of personality dominates over professional qualification when it comes to choosing employees. Table 1 below describes the most significant attributes of each skill domain.

Table 1 **Identified skills gaps (Source: authors)**

Domains	Frequently represented attributes
Entrepreneurship	Project management, financial management, human resource management, psychology knowledge in the context of human resource management, teamwork skills, smart adaptation to future trends and, business environment comprehension, event management skills.
Product development	Experience design, smart usage of resources, comprehension of customers and their needs, quality management skills.
Sales and integrated marketing communication	Marketing (including online), online sales, public speaking and writing skills, proactivity in sales.
Cooperation and networking	Partner search, inter- and cross-sectoral cooperation at local, regional, national, international level; comprehension of the role of cooperation in context of the structure of the industry.
Foreign languages	Russian language. Minimum - two foreign languages at advanced level (writing, speaking).
Internationalization & cross-cultural communication	Reaching new segments (Far East market), safety perception in different cultures, internationalization.
Destination management strategy	Comprehension of the role of the tourism industry, resource management, investment management, strategic planning, mastering visitor payback schemes.
Information and communication technologies	Usage of specific software for graphic design, video, database management, website administration, cartography; functions of social media platforms; mobile applications.
Customer service	Conflict management, client psychology, work with different age groups, general skills of customer service.

The informants stressed the need to recruit employees having a wide spectrum of skills and knowledge, as the majority of organizations in the tourism sector is small in size (number of employees, budgets etc.), and employees are expected to perform multiple tasks.

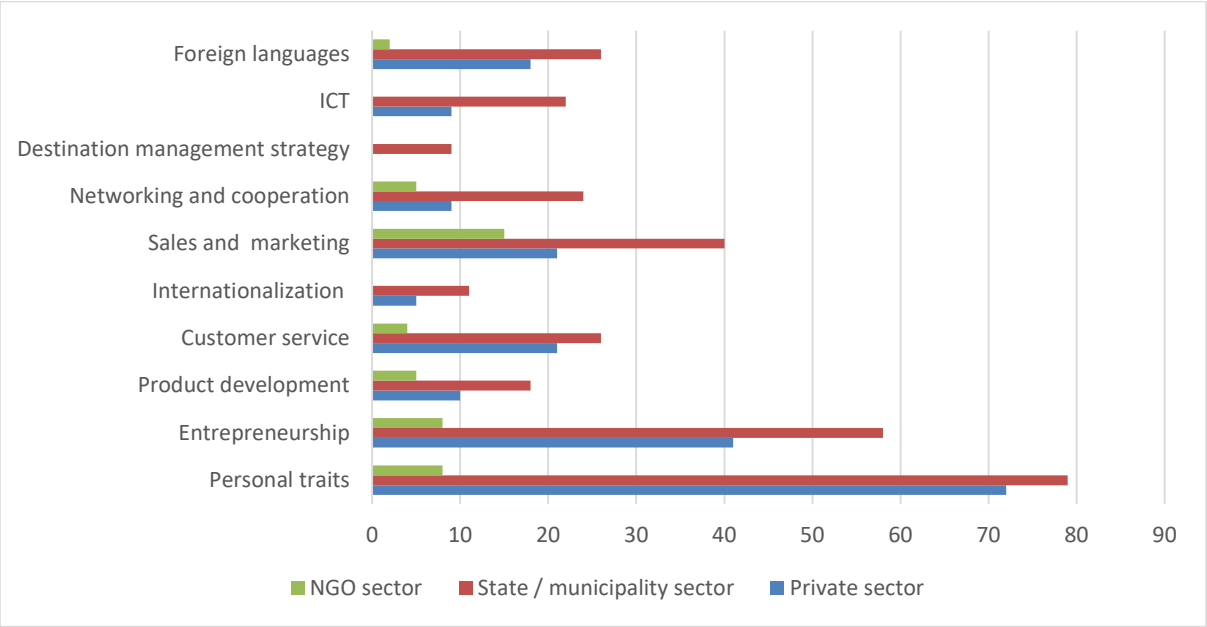

Figure 1. **The perspective of different sectors on the tourism industry – the frequency count of needed skills and personal attributes (Source: authors)**

Figure 1 presents opinion differences among the sectors; however, several domains show insignificant differences among the sectors. First, personal traits and attitude of graduates is the major area of concern for employers in the private and state / municipal sectors. A quote from the interview describes experience with young employees: *"It is the issue with millennials. The motivation to work is lost absolutely (..) They are not motivated, responsible, hardworking. They do not understanding the meaning of the work and why one has to work."*

The main difference among the sectors is identified in the domain for destination management. It is frequently mentioned by state and municipal stakeholders that are more concerned about the strategic level of destination development.

The stakeholders cited they had not experienced sufficient cooperation with universities, e.g. HEI never showed any interest in the performance of their trainees during internships or in not fully using the potential of students` research in a way that it generates benefits for the industry. The data also suggested universities should use a hands-on teaching approach rather than focusing on theory and specifically stressed that HEIs should facilitate their students to experience different tourism products on a regular basis in practice. The area of major concern was the insufficient professional training of graduates. Overall, the stakeholders were critical about the employability of graduates and the most negative opinion was hold about: (1) attitude towards work and ability to take responsibility, (2) ability and motivation to learn; (3) erudition and analytical

skills; (4) inappropriate ambitions; (5) inapplicable personality for work in the tourism and hospitality sphere.

Conclusive discussion

The study findings confirm that the graduates of tourism study programmes do not satisfy the demand of the Latvian tourism sector and employability is not sufficient. This opinion is shared by the majority of informants in all sectors – private, NGO, state and municipalities. Even more – the tourism sector reports the shortage of core skills in tourism such as designing tourist experience, marketing and sales. Overall, HEI offers in tourism education can be described as standardized and as reactive. It passively responds to the recent demand by the tourism industry in the best way, but definitely it does not forecast and train the professionals for future needs. It seems to be the illusion that HEI have developed strong connections with the industry as a result of internships and industry specific education.

Despite positioning Latvian higher tourism education programmes as professional ones, the connection between HEI and the industry is week. The lack of cooperation and networking among educators and the tourism sector seem to be one of the main reasons why education in general does not meet the expectations. Ironically, the study findings confirm cooperation and networking formally is branded as needed; however, in reality of the Latvian tourism industry it is insufficiently practised among stakeholders themselves, e.g. entrepreneurs frequently do not relate the success of their business to the overall success of the destination and feel no motivation to cooperate to promote the destination.

Tourism study programmes in Latvia combine both vocational and liberal aspects - according to the curricula of tourism study programmes, the needs demanded by the tourism sector, in fact, are taught to students, every study programme offers internships as well, yet employers are still critical. It might be that the content of study programmes in general is developed according to labour market needs but applied teaching methods do not work. A “hands-on” approach should be increasingly integrated in the study programmes and the approach to internships should be revised - practice confirms the length of internships is sufficient; however, the organizational failures on both sides (mostly HEI, but frequently also internship organizations) do not allow to meet the training goals. The study results agree with Lourenço & Jayawarna (2011) suggesting to rethink the pedagogical approaches used in classes in order to promote the development of non-cognitive skills, such as proactiveness, creativity, leadership. The teaching methods also should involve more frequent contact with tourism sector organizations and should promote meaningful cooperation projects among HEI and the industry.

Considering that the major area of concerns relate to the personality traits of graduates - attitude towards work, low motivation to learn and work, responsibility etc., educators should increasingly work on personality development. The major area of concern for tourism sector organizations in relation to human resources relate to the characteristics of millennials. Human resource managers do not have sufficient skills how to supervise the employees of this generation. However, it would not be fair to blame only HEI for personality mismatches - primary and secondary schools, families play part. HEI in Latvia cannot afford to be selective and to enrol only the best candidates into study programmes because of financial pressure.

The majority of organizations engaged in Latvian tourism are small by size and employees have to deal with a wide spectrum of tasks, and they expect from universities universally trained graduates. They frequently want somebody with cognitive capacity of postgraduate and strong vocational training, which is the task of vocational schools. It might relate to the fact that many stakeholders cannot make difference among tourism graduates at vocational school, college or bachelor level.

However, the study findings do not give an answer to the question: do employees, entrepreneurs, local governments, and other stakeholders are actually willing to participate in the development of higher education in tourism? Would they consider investments of time and efforts in the education system as investment in future or avoidable cost?

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NEW APPROACHES IN MATHEMATICS EDUCATION: THE REGIONAL DEVELOPMENT CONCEPT OF MATHEMATICS EDUCATION

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Abstract. *This project focuses on development of Maths' popularity among students. The aim of the research is to preserve and improve the traditions in Mathematics education in the Samara region. The article then extends different methods and strategies of gaining popularity in mathematical knowledge in the region. The methodology of the research was held of using secondary data, also the results of several projects, which were launched in this field, were used. As a result, this approach offers continued support and ultimately increases students' achievements, engagement and retention. In addition, the authors made a comparison between the previous and future projects in order to show the gap in methodologies in Mathematics education.*
Keywords: *education, development, institutions, knowledge, Mathematics, method, motivation, project, research, students, teaching, technologies, training.*

Introduction

"Mathematics is one of the oldest of sciences;
it is also one of the most active;
for its strength is the vigour of perpetual youth."
Andrew Russell Forsyth (1858-1942)

Throughout mankind's history Mathematics has been an integral part of human culture, a key to understanding the world around us, a base of scientific and technological progress. The study of Mathematics plays a system-forming role in education, developing the cognitive abilities of a person, as well as logical thinking, and influencing the process of teaching other disciplines. The reason for the penetration of Mathematics into various branches of knowledge is that it offers precise models for studying the surrounding reality, in contrast to the less general and more diffuse models offered by other sciences. Without modern Mathematics and its logical and computing apparatus, progress in various areas of human activity would not be possible (de Lange, 2003). A high

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level of Mathematics education is necessary in order to fulfil the task of creating an innovative economy, providing long-term goals and objectives for social and economic development of the Samara region.

Proficiency in Mathematics is as an essential precursor to success in modern society necessary to ensure highly qualified specialists for the knowledge-based, skill and technology-intensive industries.

Mathematics education researchers seek answers to important questions that will ultimately result in the enhancement of Mathematics teaching, learning, curriculum, and assessment, working towards “ensuring that all students attain Mathematics proficiency and increasing the numbers of students from all racial, ethnic, gender, and socioeconomic groups who attain the highest levels of mathematics achievement” (National Council of Teachers of Mathematics, 2014). However social changes exacerbate the problems of development in this field. In order to simplify their consideration, the challenges are divided into the following groups: motivational problems, meaningful problems, teacher-related challenges.

Lower learning motivation of pupils and students is intricately linked to the social underestimation of the importance of mathematics education, the congested curriculum in schools and higher educational establishments, as well as appraisal and training materials with outdated content and the lack of training programs to meet the needs of students and the actual level of their training (Gould, 2010). All this leads to a larger mismatch between the tasks of the intermediate and state final certification and the students' actual knowledge base.

The choice of the content of Mathematics education is outdated and becomes detached from life, from reality. The needs of future specialists in mathematical knowledge and methods are not sufficiently taken into account. The lack of differences in curricula, appraisal and training materials, in the requirements of intermediate and state final certification for different groups of students leads to a low efficiency of the educational process, substitution of training by exam preparation. The level of Mathematics education in the institutions declines, due to the absence of an update mechanism of the content of Mathematics education.

Teachers are the key to the positive and sustainable development of education system. They now constitute the principal challenge to quality Mathematics education for all. The problems are manifold, quantitative and qualitative (UNESCO, 2012).

The quantitative teacher recruitment and retention problem is a major issue and, if it is to be solved, the problems of Mathematics education after basic education must be examined. To overcoming this challenge, the real importance of the profession must be recognized socially and teachers’ working conditions

must be improved. Furthermore systematic efforts must be made to give all teachers access to networks, resources, in-service training, exchanges and collaboration with others (UNESCO, 2012).

The other problem is quality. Today there are not enough teachers in the region who can teach mathematics in a qualitative way, taking into account interests of different groups of students. The existing system of training, professional retraining and regular in-service training of teachers does not meet modern requirements. The graduates of higher educational pedagogical institutions, in their majority, do not meet the qualification requirements, professional standards, have little experience of teaching and applying of pedagogical knowledge. The system of additional professional education of teachers is not effective enough and is often formal in terms of improving Mathematics education.

Trying to solve all these issues, the authors of the present paper developed the Regional Concept of Mathematics education in the Samara region.

The Regional Concept of Mathematics Education of the Supporting University in the Samara Region

The aim of the Regional Development Concept of the supporting university is to raise the regional Mathematics education to the leading position in the country. Mathematics in the Samara region should become an advanced and attractive area of knowledge and activity, while the acquisition of mathematical knowledge – a conscious and internally motivated process.

The objectives of the development of Mathematics education in the Samara region on the basis of the supporting university are:

- modernization of the curricula of Mathematics education at all levels (ensuring their continuity), based on the needs of students and society in general mathematical literacy, in specialists of various profiles and levels of mathematical training, in the high achievements of science and practice;
- ensuring that there are no gaps in basic knowledge for each trainee, because there are “no children incapable of Mathematics”, ensuring confidence in the adequate tasks of the state final certification, providing teachers with diagnostic tools (including automated ones) and overcoming individual difficulties;
- ensuring the availability of information resources necessary for the implementation of educational programs in mathematics education, among them the electronic records and the use of modern technologies in the educational process;

- improving the quality of teachers' work, enhancing the schemes of their financial and social support, providing them with opportunities to access the best models of Russian and world mathematics education, the achievements of pedagogical science and modern educational technologies, creating and implementing their own pedagogical approaches and author programmes;
- supporting the leaders of Mathematics education (teachers and scientists, as well as the structures around the leaders), the identification of new leaders;
- providing students with high motivation and showing outstanding mathematical abilities, all conditions for the development and application of these abilities.

To achieve all these objectives, we implied Mathematics education in different levels of education: in secondary education, vocational education, professional education and additional education.

At the level of secondary education, Mathematics education should provide each student the opportunity to achieve the level of mathematical knowledge necessary for further successful life in society and provide each student with intellectual activity at an affordable level, using the beauty and fascination inherent in Mathematics.

In the secondary education, it is necessary to provide training for students in accordance with their requests to the level of training in the field of Mathematics education.

It is crucial to provide each student an opportunity to achieve any level of training, taking into account his individual needs and abilities and regardless of the place and conditions of residence. The ability to achieve the required level of Mathematics education should be supported by the individualization of teaching, the use of e-learning and distance education technologies (Medvedeva, 2015). The possibility of achieving a high level of training should be provided by the development of a system of specialized educational organizations and specialized classes, a system of additional education in mathematics, a system of Mathematics competitions (Mathematical Olympiads, etc.). Appropriate programs can be implemented by higher educational establishments (within existing and established educational and research centres of universities, as well as network forms of educational programmes).

Achieving any level of training should not hamper the individualization of teaching and keep open the option of further education or changing the profile.

It is necessary to stimulate an individual approach and individual forms of work with trainees lagging behind, involving educators with extensive experience.

Improvement of the content of Mathematics education should be provided through advanced training and additional professional education of teachers based on leadership practices of Mathematics education formed in educational organizations.

At the level of vocational education, system should provide the necessary level of mathematical training for the needs of mathematical science, economics, scientific and technological progress, security and medicine. Thus, it is required to develop modern educational programmes, to include basic mathematical directions in the relevant priority areas of modernization and technological development of the Russian economy (Pavlova & Pitt, 2003).

Students who study Mathematics and Information Technology and their teachers should participate in mathematical research and projects. Teachers of the Faculties of Mathematics at classical universities need to conduct fundamental research recognized by the professional community, and their students should devote much more time than at present to solving creative and research tasks. Teachers of Mathematics departments at technical universities should conduct research in fundamental mathematics or in applied fields, carry out the orders of different organizations with their students (similarly for economic and other educational organizations of higher education). Teachers of Mathematics departments at pedagogical universities should work with schoolchildren; participate in the development of attestation materials, textbooks for schoolchildren. Students (including those who are preparing to become teachers and educators in educational institutions) need to solve the problems of elementary Mathematics in the area of their development, to practice at school much more than today, using this activity as a basis and motivating factor for obtaining psychological and pedagogical knowledge.

The interaction of the bodies that carry out management in the field of education, educational organizations of higher education and general education organizations should be aimed at supporting the best graduates of Mathematics faculties of pedagogical universities, and graduates of profile specialties of classical universities. It is necessary to provide the best graduates, who have studied the mathematical orientations of educational institutions of higher education and who have propensities and abilities for pedagogical work, the opportunity to work at higher education institutions.

In order to achieve each objective in sequence, it is planned to refine the system of labour evaluation taking into account the specifics of the activity and international practice of assessing the work of teachers of Mathematics, scientific and pedagogical workers of higher educational establishments and scientific workers of scientific organizations engaged in the field of Mathematics.

At the level of higher education, institutions and research centres should provide an advanced level of fundamental and applied research in the field of Mathematics and its use in Mathematics education. It is necessary to strengthen the integration of Russian mathematical research work into the world science, to ensure the achievement of high positions in the world rankings by the Mathematics faculties of leading Russian universities, as well as the quality, quantity and quoting of Russian mathematicians, the attractiveness of Russian Mathematics education for foreign students and professors (Igoshin, 2012). The mobility of students, post-graduate students and young candidates of science should improve cooperation between educational institutions and research institutes should develop.

Higher education institutions and research centres should participate in the work on the Mathematics education and popularization of mathematical knowledge in Russia.

Successful teachers are provided the opportunity for their professional growth in the form of scientific and applied work, additional professional education, including training in various organizations – leaders in fundamental and applied research in the field of Mathematics and Mathematics education.

At the level of additional education system, including mathematical centres, clubs and competitions is an important part of the Russian tradition of Mathematics education that should be state-supported. At the same time, new forms such as obtaining Mathematics education in distance form, interactive museums of Mathematics, mathematical projects on the Internet portals and social networks, professional mathematical Internet communities should be developed.

All possible opportunities are taken to promote Mathematics and to stress its importance:

- providing state-supported and accessible Mathematics for people of all ages and able to provide anyone with unexpected aids to understanding and action (UNESCO, 2012);
- creation of conditions for a positive attitude towards the achievements of mathematical science and research in this field, understanding the importance of Mathematics education for the future of our country, being proud of Russian scientists' achievements;
- providing continuous support and raising the level of mathematical knowledge to satisfy the person's curiosity, his cultural needs, the acquisition of knowledge and skills used in daily life and professional activities.

The Best Pedagogical Practices of Samara State Technical University (Supporting University) in the Field of Popularization of Mathematics Education

In order to engage in productive mathematical conversations, teachers tried to create and orchestrate discourse and structure learning environments to deepen engagement and support learning. Effective practices at the Samara State Technical University support students as they learn to participate in mathematical discourse. They are Interregional Olympiad of schoolchildren in Mathematics, SAMMAT (see http://sammat.ru/), the program "VZLET" (see http://vzletsamara.ru/), Mathematical School «TALENT» (see http://talant.samgtu.ru/), Mathematics Public Lectures (see https://www.samgtu.ru/node/7263). All mentioned events promote mathematical thinking and discourse in the Samara region.

Interregional Olympiad of schoolchildren in Mathematics "SAMMAT" is an annual Olympiad in Mathematics for schoolchildren of 6-11 grade. The history of «SAMMAT» began to be written in 1993 by the teachers of Samara universities, Professor Andreev A. A. (Chairman of the Organizing Committee of the Olympiad), Professor Radchenko V. P., Associate Professor Alyakin V. A., with the support of the Samara regional branch of the Russian Academy of Natural Sciences (Chairman - academician Astafyev V. I.).

Annually, approximately 20 000 pupils from the schools of Samara, Ulyanovsk, Orenburg, Penza, Saratov regions, the Republic of Bashkortostan, Mordovia, Belgorod region take part in SAMMAT. Since 2009, all exchange information between participants and the organizing committee of the Olympiad (registration of participants, placement of tasks, information on the results and results of the Olympiad) is conducted using the latest information technologies.

The main goals and objectives of the Olympiad are to identify and develop the creative abilities and interest in scientific activity of students from various regions of the Russian Federation, create conditions for intellectual development, support gifted children, including their assistance in professional orientation and continuing education. All universities participating in the organization of the Olympiad have specialized schools within their Alma Mater, which try to involve students in an intensive process of studying Mathematics. The winners of the Olympiad enrol in various faculties of the leading universities of the country, actively participate in research work.

It should be mentioned that the winners of the Olympiads of the previous years are engaged in Mathematics research. Many of them are the candidates of science (S. A. Beilin, D. V. Dmitriev, K. V. Lykov, M. V. Ignatyev, V. Sevostyanova, M. N. Saushkin, I. Saushkin, E. A. Kozlova and many others) and even have PhD degree (I. V. Minakov, A. A. Yudashkin).

By order of the Ministry of Education and Science of the Russian Federation No. R-727 of October 24, 2017 Interregional Olympiad of schoolchildren SAMMAT is included in the list of international schoolchildren's Olympiads with the allocation of quotas for training in Russian universities for winners of the Olympiad among foreign citizens (see http://minobrnauki.rf / documents / 11773).

A unified regional scientific and educational environment for creatively gifted youth in the field of science, technology and technology has been created in the Samara region. A key role in the formation of the Governor's Register of creatively gifted youth in the field of science and technology, as well as in further coordination of professional and personal development of its participants, is the inter-departmental chair “Informational Developing and Educational Systems and Technologies” of Samara State Technical University. On the basis of the developed information and communication system, the department forms youth research micro-collectives “pupil-teacher-scientist” at the school level and different-aged youth research teams at the level of the university-enterprise in accordance with the chosen scientific topic, monitors and supports the projects: projects of schoolchildren (the “VZLET” Program) and student projects (the “POLET” Program).

The most numerous projects for schoolchildren are the “Mathematics” section. Currently, there are 10 794 users registered in the scientific and educational programme “VZLET”. These are students of secondary schools, teachers, university professors, representatives of the territorial offices of the Ministry of Education and Science of the Samara region and partner organizations.

In total, 1564 themes of research projects proposed by scientists from 15 universities of the Samara Region were introduced into the system. At the moment, there are 1501 projects under implementation: projects on Mathematics - 167, Physics - 123, Biology and Medicine - 113, Chemistry - 96, Computer Science and ICT - 88, Economics and Management - 74, etc.

94 of 167 projects performed in Mathematics, are carried out under the supervision of high school teachers, the rest of the projects are under the guidance of school teachers. Table 1 shows the distribution of projects management by scientific advisers on Mathematics at the universities of the Samara region. Table 2 shows the distribution by classes. The greatest activity is shown by pupils of the 8^{th} and the 10^{th} grades.

Table 1 **A set of projects on Mathematics at higher education institutions**

№	University	Number of projects
1.	Samara State University	23
2.	Samara State Technical University	40
3.	Volga State University of Telecommunication and Informatics	14
4.	Togliatti State University	17
	Total:	**94**

Table 2 **A set of projects on Mathematics by age of the trainees**

№	Grade	Number of projects
1.	5 Grade	1
2.	6 Grade	1
3.	7 Grade	1
4.	8 Grade	28
5.	9 Grade	17
6.	10 Grade	24
7.	11 Grade	21
8.	1 course of pre-higher education	1
	Total:	**94**

Another important project of Samara State Technical University is mathematical School «TALENT» opened in October 14, 2016. It was attended by more than 100 people from 20 schools of Samara. The head of the school is the founder and the permanent head of «SAMMAT Olympiad», the candidate of physical and mathematical sciences, Professor A. A. Andreev. «With the students of the Mathematical School, we will meet once a week to study complex and interesting problems and the theory of the subject», Andreev explained. Classes are free of charge and are aimed primarily at pupils of the 10-11th grade.

In addition, on the official site of Samara State Technical University provides Mathematics Public Lectures of scientists. Among others, Olga V. Yusupova, Ph.D., the Head of the Department of Higher Mathematics talks about Mathematics in engineering education. The lecture is addressed to schoolchildren and students-future engineers with the aim of forming motivation for studying Mathematics. Public lectures were recorded as part of the implementation of the section “Popular Science” of the strategic project “Technology Polygon” of the supporting university.

Conclusions

Realization of the Regional Concept of the Supporting University will provide a new level of development of Mathematics education in the Samara region, which will improve teaching of other subjects and accelerate the development not only of Mathematics but also of other sciences and technologies. This will allow our region to take the leading position in the country as well as to increase students' motivation and popularize Mathematics education among young generation.

These mathematical events described in the article help students to express themselves through projects. The participants can appreciate and remember mathematical facts more clearly. Mathematical events are also effective in bringing desired changes in average or even slow learners. Preparing and demonstrating mathematical knowledge help them to participate in the learning process more actively. The students, who have lost interest in Mathematics due to its abstract nature, change their attitude after understanding the concepts in a concrete way. There is also a chance of getting appreciation from teachers, parents and other participants, which in turn inspires them to think and work with self-confidence. They own much and show interest in Mathematics.

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THE ROLES OF UNIVERSITY TEACHERS IN BUILDING TEACHER STUDENTS' CAPACITY OF REFLECTIVE PRACTICE THROUGH THE PROCESS OF EXPERIENTIAL LEARNING

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Abstract. *As the carried-out research study shows, proper interpretation of the concepts of reflective learning, the reflective practitioner and the experiential learning theory in the context of higher teacher education provides a solid theoretical background for the analysis of the teaching-learning process of pre-service teachers' reflective practice and the support to be provided by teacher educators. By employing the method of the scientific literature review, the current research paper aims to investigate the roles of teacher educators within the framework of the afore mentioned theories that are considered to ensure adequate assistance to pre-service teachers in their becoming reflective practitioners. As the results show, in order to carry out effective facilitation, teacher educators should acknowledge and adopt a wide variety of roles while developing pre-service teachers' capacity of reflective practice.*
Keywords: *experiential learning; pre-service teachers; reflective practice; teacher educators' roles; university.*

Introduction

The phenomenon of reflective practice in pre-service teacher education has been constantly approached from different perspectives in recent scientific studies (Collin et al., 2013). It is well supported in the literature that reflection is a process (Dewey, 1933, 1938; Jay & Johnson, 2002; Lane et al., 2014). The investigations into different aspects of reflection, such as its depth (Lee, 2000), dimensions (Jay & Johnson, 2002), levels (Larrivee, 2008), types (Grushka et al., 2005) share a conceptualisation that reflective practice is a cognitive process that can range from a lower level through to a deep, even transformational, level. Current studies provide the evidence that pre-service teachers, especially beginning teachers, lack proper skills needed to reflect on their practice or do it in a superficial way (Cavanagh & Prescott, 2010), while on the other hand, reflective practice is proved to be developmental, and can be enhanced through the employment of appropriate models (Korthagen & Vasalos, 2005; Ryan & Ryan, 2012) and assessed with the help of instruments specially

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devised for this purpose (Thorsen & DeVore, 2012). Nearly all the studies imply the need for providing proper guidance in promoting the development of student teachers' capacity to reflect on their practice (Schön, 1983, 1987; Brockbank & McGill, 1998; Ostorga, 2006; Larrivee, 2008; Elliot-Johns, 2014; Rodgers & LaBoskey, 2016) which is closely interrelated with its facilitation. While approaching the teaching-learning process of reflective practice in higher education, one of the most popular and frequently cited educational theories is Kolb's Experiential Learning Theory (1984) the main assertion of which is that learning is knowledge creation through the transformation of experience and proposes the model relating the process of reflection to learning. Whilst there is a large, broad and diverse base of literature on reflective practice in pre-service teacher education, the discussion on the roles of teacher educators in facilitating the development of their students' reflective practice is theoretically limited. Therefore, the question arises that can be stated as a research problem: how the adoption of Kolb's model of experiential learning enables the development of teacher students' reflective practice and what roles teacher educators have to play so that their students' capacity to reflect on their practice could be increased? ***The object*** of the research is the roles of teacher educators in facilitating reflective practice of student teachers in the context of experiential learning theory. Drawing on D. A. Kolb's theory of experiential learning, ***this article aims*** to disclose the roles of teacher educators in incapacitating pre-service teachers to reflect on their practice.

In the first part of the article the theoretical background for understanding reflective practice in the context of pre-service teacher education with the reference to the conception of reflective learning, the notion of the reflective practitioner and the model of experiential learning are revealed. The second part of this paper explores the roles teacher educators perform during the teaching-learning process of pre-service teachers' reflective practice based on Kolb's model of experiential learning.

This study employs ***the methods*** of scientific literature review and the theoretical analysis of D. A. Kolb's theory of experiential learning (1984).

Understanding pre-service teachers' reflective practice at university in the context of the model of experiential learning

In exploring the literature on reflective practice within the context of pre-service teacher education, the concepts of reflective learning, the reflective practitioner, and experiential learning are usually approached and become relevant, since they help to gain a better understanding of reflective practice. All of them put the notions of reflection and experience at their heart. The central idea behind such a positioning is grounded in the proposition that learning is, in

effect, learning from experience by reflecting on it (Moon, 2004). The elaboration of the role of reflection and experience as the underlying notions proper interpretation and implementation of which would ensure meaningful learning in the formal setting of pre-service teacher education is based on their potential to enable student teachers not only to build proper professional knowledge during their course work and practicums, but also to develop them as reflective practitioners who are able to successfully apply the knowledge gained in future practice.

As for the concept of *reflective learning*, it is most often used to define teaching/learning, during which reflection is applied as one of the main means to analyse the experience. Brockbank & McGill (1998) in their work on reflective learning in higher education define *reflection* in two senses: as the process or means by which an experience, in the form of thought, feeling or action, is brought into consideration, while it is happening or subsequently; and the creation of meaning and conceptualization from experience and the potentiality to look at things as other than they are, the latter part embodying the idea of critical reflection (p. 66). Treated in this way, reflection is supposed to contribute to transformative learning of students (ibid., p. 79). The concept of *reflective practice* is closely interrelated to *reflective learning*. Drawing on Barnett's (1992) proposition that all students at university can engage in reflective practice, the latter becomes a means by which learners can potentially achieve critically reflective learning. In this respect reflective practice becomes a core attribute of critically reflective learning (Brockbank & McGill, 1998: p. 73). For Moon (2004), *reflective practice* is a professionalized form of reflective learning when reflection is used as a means for dealing with ill-structured and/or unpredictable situations in carrying out professional or other complex activities (p. 80). Primarily being defined by John Dewey, in the literature *reflective practice* is mainly associated with works of Donald Schon (1983, 1987) for whom reflective practice involves thoughtfully considering one's own experiences in applying knowledge to practice while being coached by professionals in the discipline. In his theory Schon also developed the concept of the *reflective practitioner* who, according to Schon (1983: p. 68), in an uncertain or unique for him situation experiences "surprise, puzzlement, or confusion" and reflects on both the phenomena before him, and on his prior understandings implicit in his behaviour. Going on, the reflective practitioner "carries out an experiment which serves to generate both a new understanding of the phenomena and the change in the situation" (ibid.). In this way, one becomes a researcher in the practice context who is able to construct a new theory of the unique case (ibid.). So far it could be seen that the concept of *reflective practice* embraces the concept of *reflective learning* and is related to the concept of experiential learning which emphasises the significance of experience for

learning. The two concepts of learning, that is the concept of reflective learning and the concept of experiential learning, are closely interlinked with each other (Moon, 2004). As Moon puts it:

Any activity or exercise that enhance reflective learning will be useful to support experiential learning and any exercise <…> that is more directly concerned with experiential learning will involve reflecting learning anyway. <…> reflection is the means by which awareness of experience is recognized and is made explicit and generalizable to other situations (ibid., p.158).

The main ideas underpinning the concept of *experiential learning* are revealed in the follow-up discussion.

While approaching the teaching-learning process of reflective practice in higher education, one of the most popular and frequently cited educational theories is Kolb's Experiential Learning Theory (ELT) (1984). Although being criticised for its insufficient attention to the actual process of reflection itself (Moon, 2004), it still remains among the theories widely referred to within the setting of higher education. D. A. Kolb called this *experiential learning* since experience is the source of learning and development. As Kolb (1984) asserts, "Learning is the process whereby knowledge is created through the transformation of experience" (p. 38). According to Kolb, the process of learning follows a cycle consisting of four stages: concrete experience, reflective observation, abstract conceptualisation, and active experimentation (see Fig. 1).

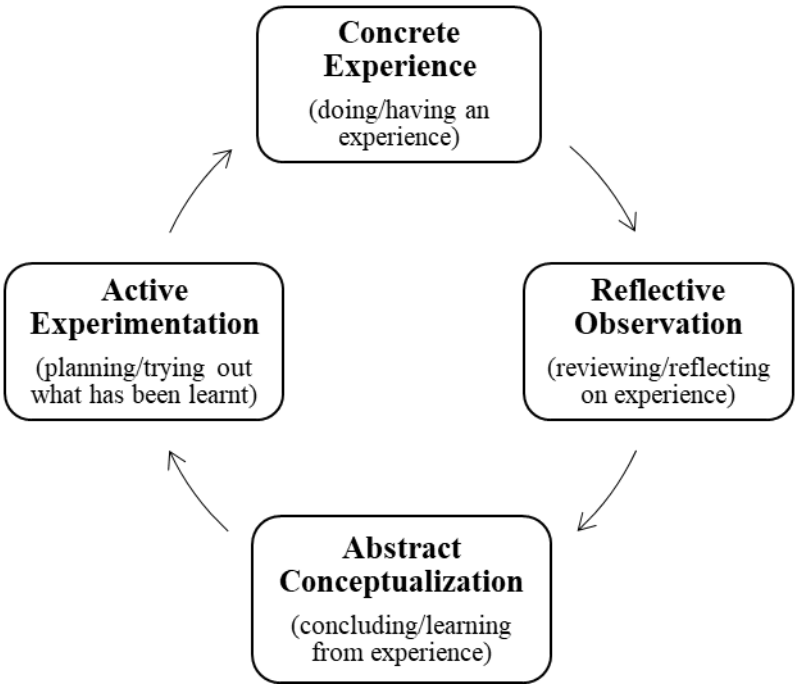

Figure 1. **Kolb's Model of Experiential Learning (According to Kolb, 1984)**

D. A. Kolb provides a definition of learning that is essentially reflective: "learning is the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping experience and transforming it." (Kolb, 1984: p. 41). Kolb's model highlights the importance of the component of reflection in the learning cycle. The essence of this model is the learning cycle when experience is turned into concepts (theories, conceptions), which in turn become guidelines for choosing new experiences. The learning cycle may be entered at any point, but learners will best learn the new task if all four stages are proceeded. According to this theory, students must pass through the cycle a few times. Then it can be called a spiral of cycle. ELT follows constructivist views of learning in that it is the process of connecting new experiences and knowledge to the learner's pre–existing personal knowledge.

The overview of the concepts discussed in this part clearly shows that the skills and dispositions needed by pre-service teachers as reflective practitioners, the ones who actively reflect on experiences in order to develop professionally, can be developed in the process of critical examination of experience gained from practice. The role of teacher educators as facilitators in this process is central. Kolb's experiential learning cycle provides feedback on what practical results (as a continuous development of personal practice) reflective practitioners create.

The roles teacher educators perform in the teaching-learning process of reflective practice through Kolb's model of experiential learning

Based on the theoretical considerations discussed in the first part of this paper, a more careful analysis of the roles teacher educators perform in fostering pre-service teachers' capacity of reflective practice while adopting Kolb's model of experiential learning is carried out. The aspects relevant to this process are summarised in Table 1. and more explicitly discussed below.

Kolb's experiential learning cycle starts with examining *concrete experiences* carefully chosen for their learning potential. It can be a new experience of the situation encountered by pre-service teachers in the learning how to teach process or a reinterpretation of the existing learning experience or the experience gained in teaching practice. Teacher educators facilitate their students by actively involving student teachers mainly through reflection-in-action in problem solving, discussions, practical exercises, for example making a presentation, debates, case studies analysis, imitation of the situation, a review of colleagues' experience in this way enabling student teachers to view their experiences from different perspectives. These considerations highlight the roles of teacher educators as *organisers* and *enablers* who through a carefully

organised teaching-learning process would actively engage student teachers in it and provide them with the possibilities to gain proper awareness of reflective practice making it a skill. Relating to prior knowledge and practices student teachers engage in a cognitive inquiry through which they find meanings from the experience and can identify new ways of acting. At this stage, it is extremely important for student teachers to understand the whole cycle of experiential learning they are going to be engaged in, its stages and the results it might lead to, which requires from teacher educators to introduce Kolb's experiential learning cycle to student teachers. In this respect, teacher educators perform the role of *informers*.

Table 1 **Summary of relevant aspects related to the facilitation of pre-service teachers' reflective practice** (developed by the paper authors)

Stages of learning	Description	The facilitator's role	Helpful strategies and activities
Concrete experience	An experience and examining what happened/engaging directly in an authentic situation.	Experiences are carefully chosen for reflection. Actively involves students.	Problem solving, discussion, practical exercises, e.g. making a presentation, debates, case studies, imitation of the situation, a review of colleagues' experience.
Reflective observation	The experience is reviewed and reflected upon to examine what was experienced and the results that occurred.	Actively engages students in posing questions. Asks students for observation. Arranges discussions with others.	Writing a short report on what took place, giving feedback to other participants, completing learning logs or diaries, discussions, working in small groups.
Abstract conceptualization	The experience is conceptualized to understand why this happened and what the results imply.	Presents models. Gives theories. Gives facts.	Working with theoretical materials, sharing the content, self-analysis of the text, clear presentation and structuring of ideas.
Active experimentation	The new thinking is applied through active experimentation or plans are made for what will be done differently next time.	Helps the learner notice the connections between one context and another, between theory and the experience. Encourages this examination repeatedly. Gives learners time to plan.	Case studies, role play, using real problems, practical works, imitating activities, group discussions, projects, individual assignments/tasks.

The *reflective observation* stage in Kolb's experiential learning cycle is supposed to be essential since student teachers reflect on their experience by gathering information in order to understand and expand it. At this stage, pre-service teachers step back from the task to review what has been done or experienced. Teacher educators actively engage students in encouraging them to pose questions: "How am I analysing what happened? What do events/ thoughts/ feelings mean? How am I interpreting them? How am I thinking about them?" In doing so, student teachers are enabled to describe and evaluate their experience, as well as analyse their behaviour, attitudes, objectives, feelings, in this way giving meanings to the situations. In this respect, teacher educators become *encouragers*. Teacher educators ask student teachers for observation and arrange discussions with others for the insights to be shared. At this stage teacher educators become the *promoters* of quality reflection. Writing a short report on what took place, giving feedback to other participants, completing learning logs or diaries, participating in discussions, working in small groups are supposed to be effective activities at this stage. All these activities are to be carried out either through reflection-in-action or reflection-on-action and, first of all, require from students the powers of observation. Therefore, teacher educators have to draw students' attention to what effective observation is and foster student teachers' ability to notice and pay close attention to things in this way becoming *fosterers*. At the reflective observation stage student teachers start looking for the interrelationship between theoretical knowledge and conceptions already gained. This provides the information necessary for the next stage - abstract conceptualization.

At the *abstract conceptualisation* stage, the experience is conceptualized to understand why this happened and what the results imply. It involves interpreting the experiences and reflecting upon them by relating them to student teachers' existing theoretical and practical knowledge, developing explanations or hypotheses that can be generalized, and integrating new information into practice. Through reflection-on-action student teachers learn from their experience, develop new ideas, foresee the perspectives which would enable them to solve the problems in the future. Teacher educators should recognize and encourage the opportunities for reflective practice to take place by providing relevant theories, presenting models and giving facts. In doing so, they are to adopt the role of *supporters*. Working with theoretical materials, doing self-analysis of the text, sharing the content with others through clear presentation and structuring of ideas are beneficial activities for student teachers' framing and explaining their experiences or any other knowledge student teachers have developed.

The final stage of the learning cycle is *active experimentation*. It is the testing of what was learned in the experience and the application of new ideas to a similar of different practical situation. Students teachers employ reflection (actually, it is mainly reflection-for-action) to create plans for further learning experiences or consider what will be done differently next time and refine or revise the way a new experience is to be handled. Case studies, role play, using real problems, practical works, imitating activities, group discussions, projects, individual assignments/tasks are the activities to be employed at this stage. Teacher educators at the active experimentation stage should become *assistants* and *mediators* in order to help their students to notice the connections between one context and another, between theory and the experience and encourage this examination to be performed repeatedly, allocating sufficient time for students to plan. All this will lead to the next concrete experience.

Thus, teacher educators perform a wide variety of roles while increasing students' capacity of reflective practice. The ones elaborated in this paper and summarised in Figure 2 are supposed to be more characteristic while adopting Kolb's model of experiential learning. They are. It is also very important to notice, that all of them are not strictly limited to one particular stage of Kolb's model and may be adopted at different stages of it as well.

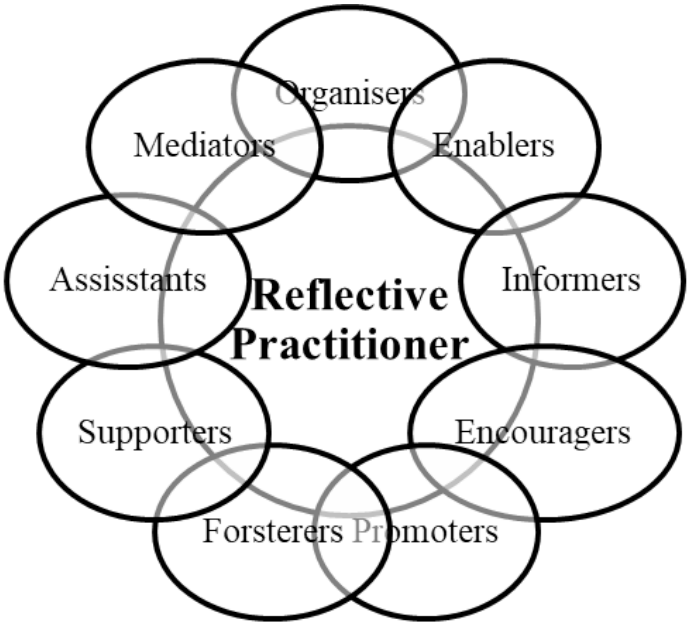

Figure 2. **Roles of Teacher Educators in facilitating reflective practice through Kolb's model** (developed by the paper authors)

Both Kolb's learning stages and cycle enable teacher educators to critically evaluate the learning contingencies relevant to pre-service teachers, and to develop more appropriate learning opportunities for their reflective practice. As

Kolb asserts, two aspects can be seen as highly significant: the use of concrete, 'here-and-now' experience to test ideas; and use of feedback to change practices and theories (Kolb, 1984: p. 21-22).

The above discussed ideas are closely interrelated to the underlying role of teacher educators as facilitators while developing their students as reflective practitioners, which needs to be clearly perceived and adopted. In order to be able to choose effective teaching methods and strategies needed for the development of teacher students' capacity to reflect, allocate adequate support, time, resources, opportunities, and create the environment, which would encourage reflective thinking to become a habit of mind in prospective teachers' learning process and their future professional lives, teacher educators have to become reflective practitioners themselves. This is closely related to the overall understanding of teachers as facilitators' role. Only by clearly understanding the importance of the reflective practice concept in pre-service teacher education and regularly engaging in careful considerations of their own professional practices through self-examination and self-evaluation so that they could be improved, teacher educators will be able to perform other roles described in this article.

Conclusions

The concepts of reflective learning, the reflective practitioner and the experiential learning in the context of higher teacher education provide a solid theoretical background for the analysis of the teaching-learning process of pre-service teachers' reflective practice and teacher educators' roles in it.

The skills needed by pre-service teachers, especially beginning teachers, to reflect on their learning how to teach and teaching practice itself are quite poor, therefore, teacher educators have to provide appropriate support for their development. The four stages of Kolb's experiential learning model are a helpful framework for building and monitoring reflective-practice based learning of pre-service teachers. The main role of teacher educators is to facilitate this process by applying reflective ways that would provide student teachers with the opportunities to analyse and learn from their experience and develop them as reflective practitioners. In order to carry out effective facilitation, teacher educators should adopt a wide variety of roles characteristic while developing pre-service teachers' capacity of reflective practice through Kolb's model of experiential learning. Finally, in order to fulfil all these roles properly, teacher educators have to become reflective practitioners themselves.

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FORMATION OF THE PROFESSIONALLY-PEDAGOGICAL COMPETENCE IN PREPARATION OF FUTURE TEACHERS IN KAZAKHSTAN

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Abstract. *The given article is considering the problem of insufficient formulation of theoretical bases of the Formation of Professional competence of students – future teachers of Vocational training in Kazakhstan upon requirements of a new educational paradigm, this impedes the integration into the global educational space. The analysis of the theories of EU, USA and UIS scientists revealed the novelty of the research in the implementation of the main directions of international experience in accordance with the requirements of the new educational paradigm, oriented towards competencies, based on knowledge, skills and attitude. The aim of the study is to reveal the professionally-pedagogical competence for the preparation of future teachers according to the structure of using primary methods of overview-theoretical analysis, including analysis and synthesis. The study design is based on the modern requirements of higher education, based on competencies of educational paradigm. The key results of the study will determinate suggestions on the Formation of the professional competence of future teachers on the example of the specialty Vocational training. On results of theories' analyse will be revealed the structure of the professionally-pedagogical competence. The question of the study is how to improve the preparation of future teachers in Higher Educational Institutions, which is depending on modern requirements of educational paradigm based on competencies.*
Keywords**:** *preparation of future teachers, Formation of the professional competence, structure, types, activity.*

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Introduction

The improvement of the quality of human capacity and provision of future Kazakhstan with highly skilled workforce is possible only under the condition of modernization of higher education in the republic, its integration into the global educational space. The field of higher education is the first priority for modern economic development of the country, since the quality of higher education predetermines sustainable competitiveness of the country in the context of the new educational paradigm.

In this regard, the overview-theoretical analysis of the competence structure will enable determination of the content of the necessary competence types, the current reform stage and the new requirements for Higher Educational Institutions of the Republic of Kazakhstan.

Particular attention must be given to the topicality of the study subject: Formation of Professional competence of students – future teachers of Vocational training, with the specialty Clothing design, in the system of higher education in Kazakhstan (Zhanguzhinova, 2018).

The aim of the study is to reveal the professionally-pedagogical competence for preparation of future teachers of the specialty Vocational training according to the structure of using primary methods of overview-theoretical analysis.

The methods of study based on theoretical analyse and review, including citation of methodological concepts, synthesis, systematization, grouping, generalization.

Methodology

The significance of the problem is the disclosure of the central nowadays idea: “science for the sector” for the formation of new specialists with human potential, and defining the economic potential of a country to a crucial extent.

The study object is the Formation of professional competence of students – future teachers for their preparation in Higher Educational Institutions of Kazakhstan.

The purpose is professional preparation of competent specialists for different innovative production sectors for the fulfilment of state orders (SCES RK, 2011; The State..., 2016).

According to the “Key competences for adult learning professionals”, the approved European definition in Higher Educational Institutions of consists: knowledge, skills and attitude (Key competences…, 2010).

In the European project “Definition and Selection of Competencies” (DeSeCo), key competences are defined as “significant in many spheres of life and are the key to success in life and effective functioning of society”.

The research of the theory (Blūma, 2008; Rauhvargers, 2003; Tauriľa, 2012; 21th century…, 2016) identified that the notion of competence is related to a specific field of activity. The activity of a teacher is characterized by his ability to form student's personality, taking into consideration the limitations and conditions of educational programme (Anspoka, 2011).

Within the framework of the present article and the conducted analysis of the theory provided above the *professional-pedagogical* type of competence of students – future teachers of Vocational training will be considered as an essential theoretical-methodological base in professional preparation.

Results and Discussion

The study of the theories, Baumert & Kunter (2013), Maslo & Tilļa (2005), enabled to the structure of **professionally-pedagogical competence**, including: methodical, psychologically-pedagogical, differential psychological, reflection of pedagogical activity and autopsychological, special and professional types of competence (see Table 1).

Methodical competence, according to Coghlan & Brannick (2001), is an integral characteristic of professional conditions, which includes socio-cultural, moral, humanistic education of personal and moral qualities of future teachers of Vocational training (Dzerviniks, 2016; Zogla, 2005), reflecting the content goal in functioning of methodological and methodical knowledge, skills, experience, motivation, abilities and preparedness for creative self-realization in organization of educational-methodical activity for the formation of skills to organize all pedagogical process activity types (O'Brien & Sarkis, 2014; Zhanguzhinova, 2018).

Psychologically-pedagogical competence, according to Usca, Lubkina & Pigozne (2012), based on professional conditions forms adequate, resultative, criterial regularity of professional and personal characteristics of a teacher, which allows to achieve qualitative results in pedagogical process (Shadrikov, 2005) and includes communicative competence (culture of communication and teaching tact), rhetorical competence (professional speech culture), cognitive competence (professional erudition) (Dolenc & Abersek, 2015), professionally-technical competence (skill to use modern methodologies and technologies, including informationally-communicative technologies), professionally-informational competence (ability to carry out pedagogical diagnostics) (Epstein & Hundert, 2002), reveals in assessment judgements in pedagogical activity that forms social characteristics of a personality of future teachers of Vocational training (Gaveika, 2016; Zhanguzhinova, 2018).

Table 1 **The structure of professionally-pedagogical competence for preparation of future teachers**

Types of professionally-pedagogical competence	**Professionally-pedagogical competence**				
	Characteristics of competences	***Activity types***	***Professional competence indicators***	***List of professional conditions***	***External factors***
Methodical	Possession of various teaching methods, didactic principles, psychological forms of work for mastering knowledge, skills, attitudes and applications in the training process (Dzerviniks, 2016)	*Educationally-methodical*	*Skill to organize all activity types related to speciality*	Socio-cultural, moral, humanistic education (Koķe, 2004)	*Organization of educationally – methodical process of activity*
Psychologically-pedagogical	Knowledge of psychology of interpersonal and pedagogical communication and age psychology; ability to carry out individual work based on the results of pedagogical diagnosis (Usca, Lubkina, & Pigozne, 2012).	*Pedagogical*	*Social characteristics of a personality*	Personality-oriented position, critical thinking, author's style and professional experience of the teacher (Kokare, 2011).	*Assessment judgments*
Differentially-psychological	Ability to identify personal characteristics, attitudes and orientation of students' learning, determine and take into account the emotional state of people (Strods, 2011).	*Educational*	*Communicativeness; Adequate assessment system*	Student's possession of knowledge of the specifics, dynamics and variability of the directions of the profession (Creswell, 2003).	
Reflection of pedagogical activity or autopsychological	Knowledge of professional self-improvement ways; the ability to know the level of their own activity, their abilities (Usca, Lubkina, & Pigozne, 2012).	*Cognitive, self-sustained*	*Gnoseological need in raising the level of self-education, qualification; creativity*	Formation of heuristic, prognostic professional knowledge, skills, attitudes (Zhanguzhinova, 2016, 2017).	*Prestige of profession*
Special or professional	Attitudes, skills, qualifications, responsibility and experience in the field of the taught subject; knowledge of ways to solve technical, creative tasks (Zimnyaya, 2006)	*Practical*	*Awareness of the importance of profession; interest in specialty*	The student possession of professional abilities, creative potential, awareness of the prestige of his profession (Gurov, 2012).	*Practice*

Differentially-psychological competence, according to Andersone (2009), comprises of the knowledge of a teacher on individual psychological characteristics of each student. Intensity of differential psychological competence formation depends on professional conditions. These enable to form criteria' levels, to reveal the results of the possession of teaching subject and information in the specifics, dynamics and variability of the directions of the profession (Dzerviniks, 2016), orientation type and ability of special, methodical and psychologically–pedagogical, and autopsychological competencies (Maslo & Tiļļa, 2005) on the basis of assessment judgements in teaching activity, forms communicativeness and adequate assessment system (Zhanguzhinova, 2018).

The reflection of pedagogical activity or autopsychological competence, according to Zogla (2005), is the most essential element of self-awareness, formed on the base of activity' organization of future teachers of Vocational training. Professional conditions are focused on the formation of heuristic, prognostic knowledge, skills, attitudes and self-improvement of the specialist (Koķe, 2002). Dependence of cognitive and self-sustained types of activity, based on the assessment judgments on the awareness of the profession's prestige forms gnoseological need to raise the level of self-education, qualification, creativity (Adubra, 2014; Atkinson, 2004; Zhanguzhinova, 2018).

Special and Professional competence, based on the definition of Khmel (1998), determined by professional conditions of unity of content and goal on theoretical and practical preparedness of a teacher in the fulfilment of professional functions. Competence is integrated in the professional and personal characteristics of a teacher and defines a training trajectory (Anspoka, 2011), acquisition of knowledge (Rychen & Tiana, 2004) and purposeful application in prediction, planning and realization of activity (Cassidy & Eachus, 2000). Activation of a teacher in the development of his own abilities (Burleson, 2005), desire for self-realization in socially beneficial activity (Zimnyaya, 2006) provides professional development of a future specialist already during the training period in HEI and in practice (Epstein & Hundert, 2002). The productive-technological activity forms awareness of the importance of the profession and interest in the specialty (AE-pro, 2015).

The analysis of the theories provided above revealed the structure of the professionally-pedagogical competence (Zhanguzhinova, 2018), including:

- types (methodical competence, psychologically-pedagogical competence, differentially-psychological competence, reflection of pedagogical activity or autopsychological competence, special or professional competence);
- characteristics of competence, based on the scientists' conceptions presented above;

- activity types (educationally-methodical, pedagogical, training, cognitive, self-sustained, productive technological) based on the research regarding the organization of students-future teachers' activity;
- formation of Professional competence indicators;
- list of professional conditions based on the scientists' conceptions presented above;
- external factors (organization of educationally-methodical process of activity, assessment judgements, the prestige of profession, practice), which are evidence of the results on the basis of the criteria for the Formation of Professional competence (Zhanguzhinova, 2018).

Conclusions

Thus, the analysis of the theories enabled to conclude that the modern stage of the Formation of professional competence of students - future teachers of Vocational Training in Kazakhstan reflects the new educational paradigm, based on the implementation of innovative processes in education in interaction with production.

In order to improve the preparation of specialists based on the integration of new knowledge, skills and attitude, based on innovative technologies and production, it is necessary:

- to consider the types of professionally-pedagogical competence;
- to develop competences and their characteristics in organizing the educational process in a university and practice;
- to create the criteria of the Formation of professional competence based on the revealed Professional competence indicators in accordance with the development of Modular Educational programmes in HEI;
- to make additions to educational programmes taking into account the need for practice, based on the revealed activity types;
- to organize work on course projects in designing specialties with determining the list of professional conditions and external factors during each semester with real topics, for real customers;
- to create a single data bank in order to systematize the registration of graduates and interact with employers for an interactive search for jobs on-line with the introduction of the applicant's data on his professional competences.

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СОЗДАНИЕ ПРОГРАММЫ КОМПЛЕКСНОГО СОПРОВОЖДЕНИЯ ПЕРВОКУРСНИКОВ, ОБУЧАЮЩИХСЯ В ПЕДАГОГИЧЕСКОМ ВУЗЕ

Creation of the Program of Integrated Training of First-Learning in the Pedagogical University

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Abstract. *Adaptation problems for first-year students are inevitable, they are social, pedagogical, psychological and subjective or objective. Teachers of the university need to be able to foresee them and some to prevent, classify and be able to organize assistance to students in solving these problems, and organize educational work as a curator of the student group. One of the objective problems is the change of the educational space and the measures of responsibility for learning outcomes. The article presents the experience of creating a program for the comprehensive support of freshmen at a pedagogical university.*
Keywords: *Pedagogical University; student; adaptation; complex support.*

Введение
Introduction

Требования к выпускнику педагогического вуза высоки, они отражены в ФГОС ВО. Уже с первых курсов студенты приобщаются к педагогической деятельности в период практики. Традиционно в образовательном процессе педагогического вуза возникает много проблем, которые каждый педагог и студент решают самостоятельно.

Результаты анкетирования 300 студентов показали, что основными проблемами первокурсников являются следующие:

- повышенная тревожность, связанная с новой социальной ситуацией и необходимостью адаптироваться к условиям вуза:
- низкий уровень развития коммуникативной культуры,
- низкий уровень развития социальных и интеллектуальных умений.

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А также из ответов студентов можно сделать вывод, что самостоятельно справиться с данными проблемами могут лишь 5 % респондентов, а остальные нуждаются в педагогической поддержке, помощи. От того, как первокурсник преодолеет данные проблемы, зависит его академическая и социальная успешность, которые повлияют и на развитие у него профессиональных качеств.

Таким образом, опираясь на культурологический и личностно – деятельностный подходы в педагогике, для эффективного решения проблем студентов – первокурсников необходимо объединять усилия преподавателей, кураторов студенческих групп, заместителя декана по воспитательной работе, психолога, библиотекаря, студентов; формой такого объединения может стать разработка и реализация программы комплексного сопровождения первокурсников.

Постановка проблемы
Formulation of the problem

Как известно, наибольшие трудности студент испытывает на первом курсе, что связано со сменой социального статуса, педагогических требований, учебного заведения и часто места жительства. Об этих проблемах мы уже писали ранее (Лучина, 2013).

Чтобы поддержать студента в этот непростой период, и увеличить эффективность образовательного процесса, считаем важным организовать в вузе комплексное сопровождение первокурсников (психологическое, педагогическое и социальное). Системная деятельность предполагает разработку программы.

Опыт создания программы комплексного сопровождения первокурсников в педагогическом вузе
Experience in creating a program of integrated support for freshmen in a pedagogical university

Теоретической основой разработки программы комплексного сопровождения первокурсников является реализация культурологического и личностно – деятельностного педагогических подходов, а также идеи педагогики сотрудничества.

Личностно – деятельностный подход к образованию предполагает организацию предметно – практической деятельности в определенном социальном контексте, создающем позитивный эмоционально – мотивационный фон. Опора на личностно – смысловую сферу осуществляется через поддержку индивидуальности студента, через

создание условий для удовлетворения культурных потребностей обучающихся, через содействие в развитии способов самореализации личности, через организацию поддерживающего и стимулирующего взаимодействия педагога и студента. Культурологический подход рассматривает образование как культурный процесс, осуществляемый в культуросообразной образовательной среде, которая наполнена смыслами и позволяет свободно проявлять индивидуальность, способность к культурному саморазвитию и самоопределению в сфере культурных ценностей.

Для разработки программы комплексного сопровождения первокурсников необходимо создать на факультете творческую группу, в которую вошли бы преподаватели первокурсников, кураторы студенческих групп, заместитель декана по воспитательной работе, психолог, библиотекарь, студенты старших курсов. Данная группа в своей работе должна опираться на принцип сотрудничества.

Предлагаем следующие этапы деятельности творческой группы: анализ проблем у первокурсников прошлых лет, анализ педагогического опыта работы на первом курсе, анализ психолого – педагогической литературы, определение цели работы, то есть ожидаемого результата, определение основных направлений работы, определение субъектов комплексного сопровождения, распределение частей по субъектам, обсуждение полученной информации, обобщение материалов и оформление примерной программы, которую далее предлагают для обсуждения на кафедрах и совете факультета. После того как совет факультета утвердит программу, начинается ее реализация, таким образом творческую группу необходимо создавать за год.

Программа комплексного сопровождения первокурсников должна включать следующие компоненты:

- пояснительную записку, где излагаются цели, задачи, основные идеи и подходы;
- календарно – тематическое планирование;
- список источников;
- приложения, в которых представлены конспекты мероприятий, темы кураторских часов, методики психологической диагностики.

Наибольшую трудность составляет разработка пояснительной записки к программе. Далее представим примерный вариант пояснительной записки такой программы.

Пояснительная записка

Актуальность темы. Студенческая жизнь начинается с первого курса, поэтому успешная адаптация студентов – первокурсников к учебе и общественной жизни в университете является залогом дальнейшего развития каждого студента как личности и будущего специалиста.

Проблемы адаптации у первокурсников неизбежны, они носят социальный, педагогический, психологический и субъективный или объективный характер. Преподавателям вуза необходимо уметь их предвидеть и некоторые предотвращать, классифицировать и уметь организовать помощь студентам по решению данных проблем, а также организовывать воспитательную работу в качестве куратора студенческой группы.

Одной из объективных проблем является смена образовательного пространства и меры ответственности за результаты обучения. Студента нужно познакомить с его особенностями. В вузах России введены Федеральные государственные образовательные стандарты (ФГОС), которые предполагают новые подходы к контролю и оценке образовательных результатов студентов. В 2011-2012 учебном году во многих российских вузах введена балльно - рейтинговая система оценки успеваемости студентов. Балльно - рейтинговая система оценки успеваемости осуществляется непрерывно в учебном процессе и предполагает накопление студентами баллов за выполнение определенных в технологической карте дисциплины (ТКД) видов деятельности.

Преподаватель производит отбор заданий для работы студентов с опорой на компетентностный подход в образовании, т.е. с учетом общекультурных, общепрофессиональных, профессиональных, специальных профессиональных компетенций и основной образовательной программы профиля.

В ТКД отражаются обязательные виды деятельности студентов: входной контроль (например, терминологический диктант или небольшой тест), текущий контроль (контрольный тест, контрольная работа). Большинство преподавателей считают нужным ставить баллы и за посещение студентами занятий или конспектирование, ведение рабочей тетради.

ФГОС предполагает, что минимум 20 % времени на занятиях будет отводиться на активные и интерактивные формы и методы обучения, поэтому можно включить в ТКД следующие задания: дискуссии, деловые игры, проигрывание проблемных ситуаций (задач), обсуждение проблемно-информационных сообщений, игровое моделирование и т.п.

Кроме обязательных заданий в ТКД предлагаются дополнительные задания, как правило, творческой направленности, за которые

выставляются премиальные баллы, например: написание статьи для студенческой газеты, участие в научно-практической конференции для студентов и магистрантов, в олимпиаде, создание презентации и др. В ТКД отражаются сроки выполнения заданий.

Трудности испытывают студенты, так как для них многие виды деятельности являются новыми, поэтому преподавателям нужно отводить специальное время (проводить консультационные часы) для объяснения процедуры выполнения заданий, требований к результату. На кафедре педагогики и психологии детства Омского государственного педагогического университета в 2012 году было выпущено методическое пособие «Самостоятельная работа студентов: задания по психолого-педагогическим дисциплинам и критерии их оценки» (Лучина, 2012), в котором определены виды самостоятельной работы, представлены задания и критерии их оценки.

Полагаем, что на семинарских занятиях необходимо развивать у студентов умение видеть и решать проблемы, возникающие в образовательном процессе; формировать гуманистические установки по отношению к субъектам; включать первокурсников в специально организованную деятельность, способствующую формированию у них системы отношений к себе, другим людям, окружающему миру.

Воспитание студентов идет лишь при субъект - субъектных отношениях. Оно основывается на субъект-субъектной парадигме, предполагающей равенство психологических позиций участников процесса воспитания, созданием психологической атмосферы взаимного уважения. Известно, что нельзя изменить другого человека, не меняясь в то же время самому, поэтому педагог должен заранее предполагать «эффект взаимного воспитания».

Представляется важным следующее положение Л. М. Митиной: «В состоянии комфортного общения две личности начинают образовывать некое общее эмоционально-психологическое пространство, в котором разворачивается творческий процесс приобщения к человеческой культуре, разностороннего познания окружающей социальной действительности и самого себя, своих возможностей и способностей, то есть разворачивается процесс социализации личности» (Митина, 2003). Мы полагаем, что в комфортном субъект-субъектном общении осуществляется и процесс - нравственного воспитания студентов, а также становится более комфортным процесс адаптации.

В атмосфере диалога происходит становление человека. Нравственные ценности формируются образом жизни, сознательным жизнетворчеством, нравственным поступком, деятельностным сопереживанием. Е. О. Галицкая отмечает, что в проблематике

образования диалог – это способ познания действительности и дидактико – коммуникативная среда, обеспечивающая рефлексию и самореализацию личности (Галицкая, 2005). Во время продуктивного общения происходит обмен сознанием, люди разных поколений учатся понимать друг друга.

Цель программы: создание системы комплексного (социального и психолого – педагогического) сопровождения студентов- первокурсников.

Задачи программы:

1. Знакомство и адаптация студентов первого курса с системой высшего учебного заведения, освоение новой роли «студент».
2. Улучшение взаимодействия между студентами – первокурсниками, сплочение групп.
3. Диагностика профессиональной направленности, способностей и интересов, опыта общественной работы студентов – первокурсников.
4. Создание условий для формирования коллективов в студенческих группах.
5. Создание условий для включения первокурсников в студенческую жизнь: в культурно-творческую, спортивную, научную деятельность.

Комплексное сопровождение первокурсников (клиентов) организуется на основе следующих принципов:

- добровольность (студент самостоятельно и добровольно обращается за помощью),
- доброжелательное отношение к студенту,
- принцип коллегиальности,
- опора на возможности и положительные качества студента.
- систематичность.

Комплексное сопровождение первокурсников выполняет ряд функций: поддерживающую, информирующую, проблемно – ориентирующую, коррекционную и др.

Успешность комплексного сопровождения первокурсников определяется множеством факторов. Прежде всего, педагоги должны обладать определенными морально – этическими качествами. Профессиональная этика включает следующие положения:

- Независимо от формы и метода взаимодействия общение не должно стать для студента дополнительной психологической нагрузкой, снизить его самооценку.
- Специалисты не имеют права разглашать конфиденциальную информацию, полученную от студента.

- Ведущий стиль работы - сотрудничество со студентом. Недопустимы какие-либо формы унижения, проявления неприязни, высокомерие.
- Специалист обязан контролировать и анализировать собственное поведение во время работы, признавать и исправлять собственные ошибки, понимать пределы собственной компетентности.

В целях успешной реализации Программы проводится комплекс мероприятий и проектов по адаптации первокурсников, которые прописываются в календарно – тематическом планировании. Управление проектом осуществляет рабочая группа, в которой, основным субъектом управления является руководитель проекта. Основными ресурсами для выполнения проектов являются:

- кадровый, научно-методический, информационный, административный и финансовый;
- штатные и не штатные сотрудники;
- студенты вуза, действующие по реализации проектов в формате волонтерской деятельности, социального проектирования или общественно-педагогической практики;
- специалисты социальных служб региона, к чьим должностным полномочиям относятся вопросы социальной поддержки.

Направления работы:

1. Организационно-методическая деятельность (цель - способствовать эффективности процесса комплексного сопровождения первокурсников).

Предполагает проведение семинаров, мастер-классов и консультаций для педагогических кадров; проведение совещаний для кураторов; разработку планов кураторов групп; составление отчетов кураторов групп, работу с помощниками кураторов из числа студентов 3-4 курса; подготовка учебно-методических разработок, практических и методических рекомендаций для педагогов по реализации комплексного сопровождения первокурсников и т.п.

2. Деятельность по непосредственному социально - педагогическому сопровождению первокурсников (Цель - содействовать процессу адаптации первокурсников, оказанию помощи в социальных вопросах).

Предполагает знакомство с социальной ситуацией студента и помощь в насущных вопросах.

3. Деятельность по непосредственному психолого – педагогическому сопровождению первокурсников в условиях образовательного процесса вуза (Цель – содействовать процессу

адаптации и процессу личностного развития, а также профессионального развития первокурсников).

Предполагает информирование студентов о воспитательных и научно-методических, а также организационных делах вуза и факультета НДиСО, включение студентов в образовательное пространство вуза.

Субъекты деятельности:

- студенты,
- педагоги,
- заместитель декана по воспитательной работе,
- заместители декана по учебной работе,
- академический консультант по работе на образовательном портале,
- медицинские работники вуза,
- библиотекарь.

Сфера деятельности субъектов:

1. Заместитель декана по воспитательной работе:
   - подбирает кадры для работы кураторами,
   - проводит для них совещания, информирует их о воспитательной работе в вузе и на факультете,
   - подводит итоги воспитательной работы на 1 курсе,
   - способствует развитию студенческого самоуправления.
2. Заместители декана по учебной работе:
   - проводят общее собрание для знакомства с правилами обучения и с образовательным пространством факультета.
   - осуществляют систематическую работу со старостами первого курса.
   - осуществляют индивидуальную работу со студентами, имеющими проблемы в обучении.
3. Академический консультант по работе на образовательном портале: осуществляет консультации студентов по работе на портале.
4. Педагоги:
   а) кураторы:
      - проведение кураторских часов,
      - создание коллектива группы, развитие самоуправления в группе,
      - проведение индивидуальной работы со студентами,

   б) предметники:
      - организация педагогических консультаций для первокурсников.

- педагогическая помощь в освоении дисциплин, работе по балльной системе.
- мотивирование на интерес к профессии.

5. Студенты:
   а) студенческий профком:
      - осуществляют помощь в решении социальных проблем,
      - информирует о мероприятиях профкома.
   б) студенческое самоуправление:
      - готовят помощников кураторов;
      - включают первокурсников в воспитательный и творческий процесс факультета.
6. Медицинские работники вуза:
   - проводят медицинский осмотр,
   - проводят беседы с первокурсниками,
   - проводят консультации первокурсников.
7. Библиотекарь:
   - знакомство с библиотекой и библиотечными фондами,
   - проведение библиотечных уроков.
8. Комендант общежития: помогает решать проблемы проживания в общежитии.

Традиционные формы, способные частично решить проблемы адаптации и воспитания первокурсников: педагогические консультации; педагогический консилиум; кураторские часы; индивидуальные беседы.

Педагогический консилиум полезно проводить несколько раз. Первый раз до первого сентября (на нем обсудить формы и методы работы с первокурсниками); второй раз в середине сентября (обсудить первое впечатление о студентах, послушать кураторов, которые заранее провели анкетирование студентов о трудностях); третий - по результатам контрольной недели; четвертый - по результатам экзаменационной сессии. Такая работа позволит не только облегчить процесс адаптации студентов, но и сохранить контингент учащихся.

Институт кураторства в вузе существует довольно давно. Кураторские часы могут способствовать процессу адаптации студентов к вузу, так как их цель заключается в том, чтобы сформировать у студентов представление о самих себе, о жизни, о вузе; научить видеть проблемы в окружающей и собственной жизни, размышлять о них, анализировать и находить решения; научить понимать своих товарищей и преподавателей, научить общаться и сотрудничать с ними, то есть развивать ценностно – смысловую и коммуникативную компетенции.

На кураторских часах необходимо развивать рефлексию студентов. Полезно задавать следующие вопросы: Что нового вы сегодня узнали? Что

вас заинтересовало? Что оставило равнодушным? Что вызвало несогласие? О чем вы хотите еще поговорить или подумать? Или попросить закончить фразы: «Я задумался сегодня о…», «Я попробую изменить…», «Я поговорю с … о…» (Zhestkova, 2016).

Во время обсуждения педагогических проблем, притч, высказываний известных людей, фильмов развивается умение видеть проблемы и умение ставить проблемы, развиваются такие особенности мышления, как открытость (то есть умение видеть ряд решений одной и той же задачи), гибкость, нестандартность ассоциативного ряда и внутреннего плана действий; развивается культура мышления студентов, дискуссионные умения, коммуникативные умения, приобретается опыт ведения интеллектуальной беседы, опыт изучения сущностных проблем; идет процесс нравственного воспитания и процесс адаптации студентов.

Куратор проводит индивидуальные беседы со студентами по мере необходимости, что приводит к доверительным отношениям с ними.

Однако деятельность кураторов этим не исчерпывается: они должны интересоваться социальными проблемами студентов, знакомить студентов с культурно – образовательным пространством города, включающим библиотеки, музеи, театры, образовательные учреждения разных типов и т. п.; проводить индивидуальные беседы; помогать в решении учебных и организационных вопросов (организация самоуправления студентов, посещение занятий, подготовка к семинарским занятиям, контрольной неделе, к зачетной неделе, к сессии и др.) (Лучина, 2016).

Обобщение
Conclusions

Таким образом, внедрение в практику высшей школы программы комплексного сопровождения студентов – первокурсников не только будет способствовать повышению эффективности образовательного процесса, но и облегчению процесса социализации студентов и объединению всех работников вуза в творческий коллектив. У первокурсников снизится уровень тревожности, повысится уровень развития коммуникативной культуры, разовьются социальные и интеллектуальные умения.

Summary

The student experiences the greatest difficulties in the first year, which is due to the change in social status, educational institution and often residence. We have already written about these problems earlier. To support the student in this difficult period, we consider it important to organize a comprehensive support of freshmen in the university (psychological, pedagogical and social). For the development of a program for integrated support for

freshmen, it is necessary to create a creative group at the faculty, which would include first-year teachers, curators of student groups, an assistant dean for educational work, a psychologist, a librarian, and senior students. We offer the following stages of the creative group activity: the analysis of problems for freshmen of past years, the analysis of the pedagogical experience in the first year, the analysis of psychological and pedagogical literature, the definition of the goal of the work, that is, the expected result, the definition of the main areas of work, the identification of the subjects of integrated support, subjects, discussion of the received information, generalization of materials and registration of the approximate program.

The purpose and objectives of the program:

1. Acquaintance and adaptation of first-year students with the system of higher education, mastering the new role of "student".
2. Improvement of interaction between first-year students, rallying of groups.
3. Diagnostics of professional orientation, abilities and interests, experience of public work of first-year students.
4. Creating conditions for the formation of groups in student groups.
5 Creation of conditions for inclusion of first-year students in student life: in cultural-creative, sports, scientific activities.

Comprehensive support of freshmen (clients) is organized on the basis of the following principles: voluntary (student independently and voluntarily appeals for help), benevolent attitude to the student, the principle of collegiality, reliance on the opportunities and positive qualities of the student, systematic.

Integrated support of freshmen performs a number of functions: supporting, informative, problem-oriented, corrective.

In solving the problems of comprehensive support for first-year students, all teachers should participate, not just the curators of student groups. This work should be comprehensive and systematic.

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SUSTAINABILITY AND UNSUSTAINABILITY ASPECTS OF INTEGRATION OF NOVICE TEACHERS IN THE SECONDARY SCHOOL SETTING

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Abstract. *Teachers are being identified as key actors for ensuring quality education, therefore they need to receive a proper professional support during their first years of work in overcoming initial challenges. As the preliminary research indicates, support that they gain is systemic and fragmentary. The aim of the study is to explore the sustainability and unsustainability aspects of integration of novice teachers in the secondary school system. The research methods employ are semi-structured interviews with fourteen teachers on their adaptation experience in the school system, considering both obstacles and factors of success. Research indicates that novice teachers leave their work within the first three years of teaching by finding demands too high and workload sometimes unmanageable. The authors offer suggestions for a more efficient and coherent process of mentoring and professional development of novice teachers.*
Keywords: *novice teachers, mentoring, integration, induction, obstacles and the success factors of the induction process, early professional development.*

Introduction

Newly qualified teachers are the future of the profession, and their impact on children and the society cannot be overestimated. However, many well-prepared, talented, inspiring and enthusiastic newly qualified teachers leave schools early, according to numerous studies.

Although there is now a wealth of evidence from research confirming how significant it is to appropriately support teachers at each stage of their professional development, still little is being done to approach teacher education, teaching career, and further continuing professional development as a coherent continuum (Hudson, 2017; Henderson & Noble, 2015). In addition, empirical studies on novice teachers' early professional experiences and development are limited in Latvia. Therefore the purpose of this qualitative study is to investigate

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sustainability and unsustainability aspects of novice teachers' early professional development, particularly focusing on factors that help or make it challenging for novice teachers to adapt to their new role, teaching profession, and school system. The study seeks to provide deeper understanding and insights into key factors influencing and shaping novice teachers' early professional development and learning in Latvian secondary school settings. The findings might as well contribute to the research that supports cultivating sustainable professional development and learning for teachers.

Literature overview

Beginning teachers' sustainable professional development and integration has recently been recognized worldwide as a key area for improving the quality of teaching and learning in schools.

The first years on the job are commonly considered to be very challenging and emotionally intense for beginning teachers, often referred to as a "sink-or-swim" or "survival" period in teacher`s career (c.f. Ingersoll et al., 2014; Voss et al., 2017; Hudson, 2017; Okas et al., 2014). The initial years in the profession have also a significant impact on teacher's future professional development, and it might be very important time for novice teachers to determine their professional beliefs, practices, and philosophy for the rest of their career. An increasing number of studies have found that novice teachers tend to have challenges in core professional practices including planning lessons and courses, applying appropriate and effective instructional strategies, dealing with "difficult" students, managing the classroom and dealing with discipline issues. When entering the profession, teachers are likely to be confronted with a range of emotional challenges, such as feeling of being overwhelmed, ineffective, and unsupported; decreased self-efficacy and self-esteem; insufficient experience and teaching skills to address a variety of everyday situations in school (cf. Owen et al., 2009; Voss et al., 2017; Okas, 2016). Classroom management and a range of discipline issues (including dealing with disruptive and aggressive student behaviour, dealing with physical and verbal violence, bullying or harassment) is generally categorized by novice teachers as a particular and often the biggest concern and reason to change school or even to leave the profession (c.f. Owen et al., 2009; Asphors et al., 2012; Okas et al., 2014). In addition, classroom management and discipline issues are the major areas in which the novice teachers commonly report having little or no necessary practical skills, and needing additional training and support (cf. Petty et al., 2016; Okas et al., 2014; Owen et al., 2009; Conway et al., 2009). Moir (1990) reports about six developmental phases a new teacher goes through during his/her initial years in teaching, namely, anticipation, survival, disillusionment, rejuvenation, reflection, and anticipation. The most

harmful ones – survival and disillusionment – are described as time when teachers encounter various challenges, trying to transform their predominantly theoretical knowledge into effective practice, solving unexpected situations, and learning a lot at a very rapid pace. As a result, teachers are likely to become emotionally and physically tired, and disillusioned, losing self-confidence, and excitement about teaching and starting questioning their competence and profession choice (Moir, 1990). Thus, "surviving" often becomes new teachers` main priority; they tend to concentrate on coping with their concerns rather than on providing high quality education. Having little or no professional experience and proven coping strategies, novice teachers "stick to whatever practices enable them to survive, whether or not they represent 'best' practice in that situation. Without systematized support, new teachers continue to depend on these strategies no matter how effective they actually are (Feiman-Nemser, 2001). It is only after some time, when novices gain enough practical experience, their focus is shifted from "non-teaching concerns and self-concerns" ("How am I doing?") to "teaching concerns" ("How are the students doing?").

"Becoming a teacher" is a complex and systematic process that extends far beyond standard four-year initial teacher education programme (Hudson, 2017; Okas et al., 2014). At the same time, it is essential to make sure that all students receive the benefit of quality teachers, no matter how experienced they are. Jensen et al. (2012) claim that "the quality of teaching received by students has the greatest impact on their education outcomes outside the impact of individual and family characteristics". Indeed, research indicates that increase in teachers' quality and effectiveness is highly likely to have the most noticeable impact on students' achievement. Students with a highly effective teacher, taking other variables into consideration, are more likely to achieve better results (or the same results but within considerably shorter period of time) than the students with a less effective teacher (c.f. Gerritsen et al., 2016; Jensen et al., 2012; Aaronson et al., 2007; Conway et al., 2009). Further, students' academic achievements tend to improve with teacher experience increase (Gerritsen et al., 2016; Hanushek, 2011). Thus, substantial number of hours of professional practice in various real school contexts is considered to be essential for building teacher competence, because "professionalism in teaching field is achieved through years of professional work" (Okas et al., 2014). Obviously, practice makes perfect, and there is evidence from various studies on novice and experienced teachers` effectiveness indicating that novices tend to have notably lower levels of self-efficacy beliefs (Jensen et al., 2012; Melnick & Meister, 2008); when compared to experienced teachers, novices tend to spend more time on classroom management and discipline issues than on actual teaching (c.f. Owen et al., 2009, Okas et al., 2014;); novice teachers tend to feel less confident to communicate with parents and utilize multiple methods of communication; novices tend to be

more concerned about dealing with poor student behaviour and lesson planning (Okas et al., 2014; Melnick & Meister, 2008), and to have worse classroom climate in their classrooms; and finally novice teachers are likely to have greater professional development needs (Jensen et al., 2012; Okas et al., 2014).

Another urgent policy issue and reason for debate is the degree of newly qualified teachers` preparedness to provide high quality education, as well as the applicability of the content of teacher education programs. On the one side of the debate are those who argue that initial teacher education is sufficient to provide teachers with all necessary teaching skills and competences required to successfully teach and integrate into school system; on the other side, however, there are those who feel more sceptical about novice teachers` readiness to provide high quality education right after completing their traditional three or four-year teacher education. The letter argue that the traditional teacher education generally do not provide adequate hours of real-life pedagogical practice in different school contexts, which makes it predominantly theory-oriented. There seems to be lack of relevance and connection of professional learning to teacher`s real work (Hudson, 2017; Okas, 2016). That is why newly qualified teachers require systematic and meaningful professional support, purposeful training, and guidance in order to develop expertise, gain confidence, and ultimately succeed in their classrooms (Okas, 2016; Hudson, 2017; Owen et al., 2009). Darling-Hammond (2008) believes that "teachers learn best by studying, doing, and reflecting; by collaborating with other teachers; by looking closely at students and their work; and by sharing what they see. This kind of learning cannot occur in college classrooms divorced from practice or in school classrooms divorced from knowledge about how to interpret practice".

It becomes evident that when schools hire newly qualified teachers with little or no experience, they cannot always expect them to perform as effectively, as their more experienced peers. Teacher education is just the initial stage in the continuum of teachers' sustainable professional development (Hudson, 2017; Petty et al., 2016) and it is critically important that the process of "becoming a teacher" is approached "as a gradual process, including initial education, the induction phase, and continuing professional development. The point at which newly qualified teachers transfer from initial teacher education and move into professional life is seen as crucial for further professional commitment and development" (European Commission/EACEA/Eurydice, 2015).

Research methodology

The study employed qualitative phenomenological research design (Hobbs, 2015). To address the questions raised in the study, the data were collected mainly through semi-structured in-depth interviews. The study sought to examine four

broad groups of sustainability and unsustainability aspects affecting novice teachers` early professional experience and sustainable professional growth: (1) teachers' well-being; (2) teachers` perceptions of their initial teacher education, their own self-efficacy, and preparedness to teach; (3) teachers` perceptions of their early teaching experience, and (4) teachers` needs for professional development and support. All interviews were recorded, transcribed, encoded and further analysed using a semantic content analysis method so as to identify categories and subcategories to describe the content. Initially, the data for each of the research participants were analysed, raising and coding the main themes that emerged from responses. Next, the data were analysed by using cross-analysis method, identifying the similarities and differences between the themes. The connections between emerging themes were identified and examined, and then a number of superordinate themes were also identified.

The participants of the study were 14 novice teachers, working in 11 Latvian comprehensive schools. The data were collected between November 2016 and November 2017. The participants were selected randomly based on willingness and convenience. All of them were teachers of different subjects and primary school teachers who have gone through at least four years of formal teacher training at a university level. All of them had been from 2 months to 3 years in the profession. Eighty five per cent of the novice teachers involved in the study were females and the majority of the respondents were under 29 years of age. Twelve of the 14 respondents were trained to teach grades 1 to 12, whilst 2 were trained to teach at primary level.

Results and discussion

The results of the interviews are presented in this section. First, the respondents were asked to identify the professional areas that they find most challenging and troublesome, as well as the areas of their work they found most in need of further development. In addition, the respondents were invited to offer their advice for overcoming these difficulties. As a result, 27 coding categories emerged from the interviews, which were further grouped into 3 overarching themes. (1) learning to control and regulate complex classroom situations ("Teaching practices"), (2) learning to communicate and build relationships ("Communication and Relationships"), and (3) learning to control and regulate teachers` own emotional resources ("Emotional well-being"). The results are presented in Table 1.

Table 1 **Novice teachers' key areas of concern**

I Coding categories under the theme "Teaching Practices"	**f=14**	**%**
(1) Handling a range of classroom management or discipline situations (including dealing with disruptive and aggressive student behaviour; dealing with bullying or harassment in the classroom);	14	100.0
(2) Engaging students and motivating them to learn;	12	85.7
(3) Understanding and addressing learners' individual learning needs;	12	85.7
(4) Dealing with students with special educational needs; identifying and supporting learners who experience behavioural, emotional, social, and learning difficulties;	12	85.7
(5) Managing resources, selecting and adapting curriculum and instructional materials;	10	71.4
(6) Managing workload/paperwork;	9	64.3
(7) Planning lessons and courses;	9	64.3
(8) Managing time, dealing with time constraints;	9	64.3
(9) Assessing learning, establishing a grading system that's fair and motivating;	7	50.0
(10) Using a variety of instructional methods and tools, inter alia, ICT tools	5	35.7
(11) Job stability, remuneration	2	14.3
(12) Lack of opportunities for growth and promotion	1	7.1
II Coding categories under the theme "Communication and Relationships"	**f=14**	**%**
Challenging relationships with (13) students' parents;	6	42.9
(14) students;	7	50.0
(15) colleagues;	9	64.3
(16) school administrators;	5	35.7
(17) Little or no support from colleagues and administration; unsupportive school culture	10	71.4
(18) Feeling of professional isolation, depreciation of novice teachers' ideas and opinions, disapproval of the novice teachers' expertise and competence;	9	64.3
(19) Lack of appraisal and feedback;	5	35.7
III Coding categories under the theme "Emotional well-being"	**f=14**	**%**
(20) Concerns for teacher`s personal physical and mental health and wellbeing	5	35.7
(21) Regular stress, emotional and/or physical overload	10	71.4
(22) Unexpectedly demanding, complex, and intense work	9	64.3
(23) Lack of confidence, insecurity, low self-esteem	5	35.7
(24) Feeling of demotivation, frustration, distress, chronic fatigue	6	42.8
(25) Managing work-life balance	8	57.1

Overall, most of the novice teachers indicated that their first teaching experience was relatively successful. However, there were clearly differences of opinions about the major challenges, especially regarding various teaching tasks. All the respondents rated handling a range of classroom management, classroom organization and discipline situations as their main concerns. They also reported feeling inadequately prepared to deal with these issues in their classrooms because these aspects were insufficiently addressed during their teacher education. More than two thirds of the respondents reported having considerable difficulties with poor student behaviour on daily and weekly basis. The novice teachers stressed that they received little or no support or assistance in addressing classroom management and poor pupil behaviour issues. In addition, dealing with lack of student engagement and motivation was also cited by more than two thirds of the respondents as their major concern.

More than half of the respondents admitted that they regularly experienced difficulties with planning, searching and adapting teaching materials, learning activities and tools that would work best in a particular context and with particular students. In general, the challenges with time management, time constraints, massive workload, long- and short-term planning, and self-organization were mentioned by the majority of the respondents. More than half of them admitted that they often felt ineffective in organizing their time in and out of class. They also added that they often did not have enough time and energy to communicate more closely with their students, to analyze their individual needs, as well as to give proper feedback and support; as a result, differentiated approach to teaching and addressing students' individual learning needs was cited as another substantial concern for the novice teachers.

Additionally, almost half of the respondents admitted that they felt frustrated about not having enough time for self-evaluation, reflection, analysis and improvement of their own teaching methods and techniques. Individual respondents indicated that because of constant stress, time pressure, and massive workload they had to reject a lot of teaching ideas and methods that they found effective and engaging; instead, they had to choose those methods and materials that were easier and faster to apply in the class, regardless of their possible lower effectiveness. They explained there was little time and energy left for creativity and experimentation, that is why teachers often had to stick to the materials and methods that were commonly in use for years, rather than to those that might bring real and sustainable results. About one third of the respondents indicated that they had to reject their initially student-centered and “democratic” teaching approach into a more authoritarian and traditional way, inter alia, because of time pressure and discipline issues in the classroom.

As shown in Table 3, there were clearly differences of opinions regarding communication aspects and relationships with colleagues, administration, students and their parents: half of the respondents described their relationships with students as largely challenging, particularly in the beginning of their careers; others indicated that it was initially rather difficult to build positive and collaborative relationships with colleagues, especially more experienced ones. In addition, the respondents experienced feelings of professional isolation, lack of appraisal and feedback, and unsupportive school culture.

Further, the teachers were asked to describe their early professional experiences in terms of their emotional well-being. As a result, a variety of affective responses emerged, some of them positive, some negative, and some mixed, as shown in Table 3. Most of the respondents indicated that they had experienced "high" and "very high" level of stress during their first years of teaching. The respondents specified that they occasionally experienced feeling frustration, dissatisfaction, exhaustion, and anxiety, and individual respondents confessed about having experienced feeling of distress, anger, chronic fatigue, and even depression.

Overall, however, the respondents indicated that despite all the challenges and intensity of their work, they generally believe that working closely with children and having possibility to influence their development and growth is very pleasant, inspirational, exciting, and rewarding, but at the same time very stressful, with some teachers saying the job has somewhat affected their mental or physical well-being. About one third of the novice teachers reported feeling occasionally insecure and weak in their teacher's role, because the job was unexpectedly demanding, challenging, and intense, with a lot of unexpected situations, different from what they had learnt in their university classrooms and what they had practiced in a controlled environment. The respondents suggested that the issues associated with teachers` emotional well-being should be rigorously addressed during the initial teacher education and professional development courses, because teacher's emotional well-being and ability to cope with regular stress has strong impact on students' learning.

Another important theme that emerged from the interviews was the content, quality, and effect of initial teacher education. There were clearly differences of opinions about the strength and weaknesses of initial teacher education content. In general, according to the responses, there seems to be a significant degree of discrepancy between the content of teacher education programs and the pedagogical skills required in schools. About two thirds of the respondents described the content as "excessively theory-oriented, leaving too little room for practical work", "too conservative", "disconnected or distant from school reality", "inapplicable" especially in regard to such complex issues as disruptive student behaviour, classroom management and organization. More than half of the

respondents reported being unsatisfied with their pedagogical pre-service practice, indicating, that its biggest weakness is that it is inadequately short with too few hours available for lessons teaching at different levels and in different classes. In fact, typically Latvian teachers do not receive rigorous professional pre-service practice and on-the-job training. Student teachers spent only about 16 per cent of their study time on pedagogical practice (While teacher education program typically includes the total of 160 KP, only 26 KP are allocated to lesson observation and pedagogical practice altogether,), which is less than 20 lessons in real school environment in 4 years' time altogether.

However, in general, absolute majority of the respondents rated the overall quality of their initial teacher education as "very good" or "good" especially at providing them with sufficient subject knowledge. The teachers identified multiple strengths of their teacher education programs, especially in regards to the ability to provide strong theoretical background. The task for which most respondents reported being "very well" or "well" prepared after graduation was teaching in their assigned subject matter and ability to use a variety of instructional methods and ICT tools in classroom instruction. The task with the smallest number of the respondents reporting being well or very well prepared was handling a range of classroom management or discipline issues. The consensus among the respondents was that the following steps should be taken in order to improve initial teacher education quality and make it more practice-oriented: (1) training emphasis should be placed on teacher education that is applicable and relevant, and (2) training should be mainly school-based: teacher training universities should closely cooperate with schools and other non-formal educational institution for children and teenagers.

According to the results of the survey, the support measures at each novice teacher's school varied considerably, however, in general, most teachers reported that they were not fully satisfied with the support they had received. Only two teachers had access to on-the-job training activities, and only one novice teacher reported being assigned a mentor. Two thirds of the respondents indicated that they had a high level of need for professional, psychological and socialization support, additional training, and constructive feedback on their teaching from experienced colleagues and school administrators so as to improve their effectiveness and teaching skills. Importantly, almost all novice teachers rated emotional support and cooperative school culture among the most helpful factors in their professional development. Additional on-the-job training focusing especially on such complex areas as classroom management and procedures, discipline, and dealing with students with diverse learning needs is unanimously considered to be very helpful.

Conclusion

The initial years in teaching are generally considered to be highly intense and challenging for novice teachers. The current survey revealed a range factors influencing and shaping newly qualified teachers` sustainable professional development and growth. Based on the findings of the study, the sustainability aspects positively influencing novice teachers' well-being, professional development and performance include: emotional rapport with students, positive relationships with colleagues and administration, appraisal and regular constructive feedback from peers and school leaders, professional support and collaborative climate, professional freedom, availability of necessary quality resources, and assistance for those who are new to the profession. The major unsustainability aspects include a significant degree of discrepancy between the content of teacher education programs and the pedagogical skills required in schools, lack of meaningful, systematic, and structured professional support system available for newly qualified teachers, as well as unsupportive school culture.

It is highly important for schools to develop effective policies to attract, recruit, retain, and support the continued learning of well-prepared and most talented teachers. In this respect, numerous actions are being taken on national and local levels worldwide to understand the needs of novice teachers, to address them, to facilitate their transition from student teacher to full-time professionals, and finally to promote teachers' sustainable instructional, personal and professional growth. These supportive measures for newly qualified teachers typically include mentoring, scheduled meetings with peers, co-teaching (team teaching), workshops and additional training for beginning teacher to inform them of relevant topics during their initial years in the classroom, to share ideas and methods, to discuss the most challenging issues, to learn to deal with variety of troublesome situations in the classroom. It is recommended that these school practices and policies are incorporated into every teacher`s ongoing professional development route (together forming so called induction program for novice teachers) in order to provide a systematic and structured support and assistance in teacher`s mastery development.

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К ПРОБЛЕМЕ СОЗДАНИЯ НОВЫХ УЧЕБНЫХ КУРСОВ ДЛЯ МАГИСТРАНТОВ ПЕРЕВОДЧЕСКИХ ОТДЕЛЕНИЙ

The Issues of Elaboration of New Disciplines for Master Program Students in Translation Studies

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Abstract. *The aim of the study is to determine the structure and content of the University course "Modern Trends in Translation Studies" for MA students in translation studies. The authors propose the following structure of new course including both historical and theoretical parts: 1. History of translation in English-speaking countries (20-21 centuries); 2. History of translation in CIS (20-21 centuries); 3.History of translation in Kazakhstan; 4. Approaches to translators' activity: Eurocentric and traditional "Soviet" approach.*
The second, methodological part of the course includes the following problems in translation studies: 1. Translation mechanisms (Western approach and Soviet tradition); 2. Basic translation strategies (Western and Soviet translators' viewpoints); 3. "Stumbling blocks" in contemporary translation (practical approach); 4. Main types of translation errors.
The third part of the course should be rather practical, aimed at the development of translation skills on the material of three languages.
Keywords: *Kazakhstani translation studies; master program; translation theory, translation school, Western approach.*

Введение
Introduction

Как указывает Э. Прунч, «открытый разговор и критическая саморефлексия, внимательное отношение к «другости» и многообразию — вот отличительные черты современного переводоведения. Принимая во внимание широкое использование сегодня термина «перевод» в культурологии и в гуманитарных науках, можно предположить, что вскоре потребуется новый пересмотр предметной области переводоведения и согласование ее со смежными дисциплинами» (Прунч, 2015: с. 211).

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В условиях официальной политики трехъязычия (английский, казахский, русский языки) во все звенья системы образования Республики Казахстан, в том числе и высшего, одной из задач для преподавателей становится не просто языковое структурирование учебных дисциплин, но (что гораздо более важно) проведение сравнительного анализа и обобщения научного и методологического опыта, накопленного разными переводческими школами, которые мы условно разделили на три группы: 1) англоязычное (или евроцентричное) переводоведение, 2) русскоязычное переводоведение (иначе говоря, переводоведение в СССР и на постсоветском пространстве) и 3) казахоязычное переводоведение (наука о переводе в Казахстане, либо казахстаника в науке о переводе). Условность данного подхода состоит в том, что в определенный период времени вторая и третья группы объединяются нами в одну – советское переводоведение. К тому же англоязычное (или столь же условно названное нами «евроцентричное» переводоведение) не является однородным и включает в себя разные подходы представителей различных школ и стран.

Таким образом, целью настоящей работы являлось определение оптимальной модели построения переводоведческого курса, призванного объединить в своем контенте элементы истории и теории перевода с учетом достижений казахстанского переводоведения.

В соответствии с данной целью, в задачи работы входило

- определение основных элементов обновленного контента;
- выявление круга проблем, необходимых для рассмотрения на уровне магистерской подготовки по специальности «Переводческое дело».

К числу методов и приемов исследования, использованных в данной работе, следует отнести *описательный метод*, так как для разработки принципов построения дисциплины, определения частей и компонентов курса представилось необходимым дать характеристику современного состояния подготовки переводчиков. Помимо этого, использовался метод моделирования, так как в цели работы входило построение модели учебного курса, необходимого для системной подготовки переводчиков в условиях полиязычия. В качестве вспомогательного приема авторами использовалось также интервьирование преподавателей переводческих и переводоведческих дисциплин, ведущих подготовку по данной специальности на уровне бакалавриата и магистратуры в университетах г. Алматы (всего было опрошено 54 преподавателя; результаты интервью в обобщенной форме приводятся ниже).

Теоретическая основа исследования
Theoretical basis of research

Вполне очевидно, что вышеупомянутые аспекты еще не стали предметом анализа ученых-переводоведов; более того, методологически необходимым представляется внедрение такого курса, имеющего на данный момент экспериментальный характер, в учебную программу на уровне магистратуры, так как именно на данном уровне становятся возможным теоретические обобщения, основанные как на знакомстве с историей перевода в различных регионах, так и на анализе глубинных принципов перевода, которые провозглашены представителями различных переводческих школ и направлений (см. Алексеева, 2008; Бузаджи, 2012; Гарбовский, 2007; Прунч, 2015; Nida, 1964; Toury, Venuti, 2001 и др.)

Предлагая модель переводоведческой дисциплины, рассчитанной на уровень магистерской подготовки переводчиков, мы в значительной мере опирались на положение, выдвинутое Н. К. Гарбовским: «Для того, чтобы освоить все тонкости непростого переводческого дела, стать настоящим мастером, необходимо прежде всего познакомиться с тем, что делали предшественники на протяжении не менее двух тысячелетий, т.е. того периода, о котором в истории перевода сохранились хоть какие-то свидетельства. *Опыт* предшественников позволяет прежде всего увидеть неразрывную связь переводческой деятельности со всей жизнью общества, место и роль перевода в развитии цивилизации. Овладение этим опытом предохраняет от повторения ложных шагов, которые иногда совершали даже выдающиеся мастера своего дела в поисках решений труднейших проблем перевыражения смыслов, заключенных в знаках другого языка, отражающих иное видение мира, иной опыт миросозерцания, иной ход суждений» (Гарбовский, 2007; 12).

Помимо этого, авторы работы предприняли попытку реализовать концепцию Э. Прунча, который, в частности, утверждал, что «взгляд в будущее показывает, что для овладения практикой динамической межкультурной и мультимедийной коммуникации в глобализованном мире должна быть разработана динамическая концепция перевода» (Прунч, 2015: 28).

Модель построения элективного переводоведческого курса (магистерский уровень)
The Model of Translation Studies Elective Course (for Master Program)

С учетом вышесказанного, первая, историко-теоретическая, часть курса структурирована нами следующим образом:

История перевода в англоязычных странах (XX-XXI вв.). В данном разделе сосредоточен материал, отражающий эволюцию направления в переводоведении, условно названного нами евроцентричным. Для данной части курса существенным представляется обращение к Nida, 1964, Toury, 1995, Venuti, 2002 и пр. Мы считаем методологически оправданным акцент на разработке лингвосемантических проблем перевода, так как это именно та почва, на которой мы можем найти точки соприкосновения трех выделенных нами переводоведческих тенденций. Так, например, по мнению Nida, 1964, основные проблемы перевода лежат в области языковой семантики. Более того, Ю. Найда предлагает описывать лингвистическое значение в терминах сочетаний четырех функциональных классов слов и морфем: объекты, события, абстракты (определители) и релятивы (связки), что позволяет подчеркнуть лингвистические основы условно выделенной нами англоязычной переводоведческой тенденции. Интересно также, что точки соприкосновения можно найти и на «территории», которая наиболее подробно освещается в трудах переводоведов СНГ и менее характерна для англоязычной переводоведческой школы. Так, например, магистрам в сфере переводческого дела необходимо осознать утверждение Дж. Тури о том, что перевод – это особый вид деятельности, в который неизбежно оказываются вовлечены два языка и две культурных традиции (Toury, 1978: 200), и, таким образом, учитывать представленность лингвокультурологического подхода в рамках условно выделяемой западной переводоведческой тенденции.

История перевода в странах СНГ (XX-XXI вв.). Необходимо подчеркнуть, что, говоря о русскоязычном переводоведении, мы подразделяем его на российское и казахстанское с учетом того, что в истории каждой из стран есть общая часть – развитие в период советского переводоведения как его неотъемлемой части. Причем это касается не только определения хронологических рамок. В советское время российское и казахстанское переводоведение развивались в одном направлении, имея общие методологические установки. Русский язык играл роль посредника в научном и собственно переводческом плане: помимо большого количества перевода художественных произведений с русского на казахский язык целый ряд литературных трудов с иностранных языков (английского, немецкого, французского, арабского и др.) выполнялся на казахский язык (Zhumabekova, A. K., & Mirzoyeva, L. Y., 2016).

Особенностью казахоязычной практики перевода в настоящий момент его развития является появление прямых переводов с казахского на иностранные (часто с привлечением носителей языков) и с иностранных языков на казахский. Но переводоведческих трудов, теоретически осмысляющих этот феномен на основе анализа данных переводных книг, пока нет.

Гораздо больше материала можно почерпнуть из большого числа работ на материале западноевропейского и российского переводоведения.

Так, в монографии Э. Прунча (Прунч, 2015) подробно освещены разные направления западноевропейского переводоведения.

В обзоре И. С. Алексеевой (Алексеева, 2008), несмотря на его название, делается попытка объединить труды не только российского, но и европейского переводоведения в рамках трех парадигм: статической, динамической и деятельностной (в хронологических рамках 50-90х гг. XX века). Последняя, по замечанию автора, в России, в отличие от западного перевода, развита недостаточно, и в целом российское переводоведение долгое время развивалось в отрыве от мирового. В последние же годы ситуация изменилась в положительную сторону. Данная часть курса логически связана с последующей, которая представляет специфику казахстанской переводоведческой традиции.

История переводческой деятельности в Казахстане. Ввиду уникальности данного материала необходимо остановиться на нем более подробно; следует особо оговорить, что в рамках данного раздела курса развитие казахстанского переводоведения рассматривается в направлении от чисто утилитарной, практической деятельности к теоретическим обобщениям. Так, в частности, говоря об уникальности общей тенденции развития переводоведения в Казахстане, нельзя не отметить значительный вклад в развитие отечественной терминологии, который внес А. Байтурсынов, 1991: он перевел на казахский язык около 1500 терминов из разных областей науки, что также свидетельствует об индуктивном направлении эволюции казахстанского переводоведения от практики к теоретическим обобщениям

Первые публикации по критике перевода[1] (С. Сейфуллин, Е. Алдонгаров, Б. Кенжебаев) содержали больше пожеланий переводчикам; началом научного подхода можно считать статью М. Ауезовао переводах произведений А. С. Пушкина на казахский язык И. Жансугурова, Т. Жарокова, Г. Орманова.

В рамках истории казахстанского переводоведения необходимо указать, что именно в советское время переводческое дело принимает широкий размах: в 20-30 гг. XX века на казахский язык широко переводится русская и мировая литература: Н. В. Гоголь «Женитьба», У. Шекспир «Гамлет» – М. Даулетбаев; Н. В. Гоголь «Мертвые души» – К. Тайшиков, Н. В. Гоголь «Ревизор» – М. Ауезов; М. Горький «Мои университеты» –

[1] Здесь и далее ввиду большого количества казахстанских авторов (писателей, переводчиков, критиков перевода) мы ссылаемся на полный библиографический указатель на казахском и русском языках в: Жумабекова А. К., 2015

М. Каратаев. На казахском языке выходят три тома произведений А. С. Пушкина и т.д.

Начиная с 1950-х гг. повышаются интерес и требования к качеству перевода. Особое место здесь принадлежит М. Ауезову, который целенаправленно стремится к адекватному переводу классиков русской и мировой литературы; более того, с именем классика казахской литературы связаны и важные теоретические обобщения в сфере казахско-русского/русско-казахского художественного перевода, которые в дальнейшем проецируются и на иные языковые пары, так как выявленные им закономерности работают и в сфере прямого англо-казахского/казахско-английского перевода. Так, в 1957 г. выходит его статья «Некоторые теоретические проблемы художественного перевода», в которой подробному анализу подвергаются различные аспекты проблемы адекватности перевода и оригинала.

Традиция профессионального перевода на русский язык казахской литературы начинается с перевода романа-эпопеи М. Ауэзова «Путь Абая». Автор сам работает с переводчиками, закладывая тем самым основы авторизованного перевода в Казахстане.

М. Каратаев рассматривает влияние творчества А. С. Пушкина на поэзию Абая, всей казахской и мировой литературы, формулирует основные теоретические принципы перевода произведений с русского языка на казахский.

В 50-е годы защищаются первые диссертации по теории перевода (З. Ахметов, К. Шәріпов, Қ. Қанафиева).

Свой опыт по переводу общественно-политической литературы обобщают М. Жанғалин, Қ. Сағындықов, Қ. Шәріпов, І. Жарылғапов, С. Бәйішев, Х. Хасенов и др.

В 60-70-е годы появляются и первые монографии по теории художественного перевода. Их авторы обобщают собственный опыт переводческой деятельности – А. Сатыбалдиев «Источник духовного обогащения» (на материале переводов произведений Л. Н. Толстого), С. Талжанов «О художественном переводе» (переводов Н. В. Гоголя); «Перевод и проблемы казахской литературы» и др.

Это время можно назвать наиболее плодотворными по количеству научных трудов в области теории (в основном, художественного) перевода и его критики (Қ. Нұрмаханов, З. Тұрарбеков, Т. Әбдірахманов, Р. Хайруллин и др.).

В 70-80 е гг. получает развитие теория и критика перевода художественных произведений с казахского на русский язык (З. Жантекеева, С. Құспанов, Х. Садыков, Е. Н. Ландау и др.), а также на иностранные языки посредством русского языка (К. Дүйсетаева,

А. Ермағамбетова, М. Құрманов, Ю. Сушков, Б. Репин). Основную роль в этом процессе сыграл выход в свет перевода романа М. Ауэзова «Путь Абая», первый том которого на русский язык перевели А. Никольская, Т. Нуртазин, Л. Соболев, второй том – Л. Соболев, Н. Анов и З. Кедрина, как было отмечено выше, при непосредственном участии самого автора. Впоследствии роман был переведен (с русского языка) на сорок языков мира многомиллионными тиражами.

Переводческую деятельность казахстанцев Л. Кривощекова, В. Антонова, А. Жовтиса, Р. Тамаринойпо переводу казахской поэзии на русский язык отличает глубокое постижение казахской образной речи и философского мировоззрения; при этом переводчики пользовались подстрочником.

Этот период отмечается появлением феномена О. Сулейменова и целой плеяды национальных кадров, профессионально осуществляющих переводы с казахского на русский язык художественных произведений без подстрочника: К. Бакбергенов, Б. Каирбеков, Б. Канапьянов, О. Жанайдаров. Е. Сатыбалдиев. Переводы этих авторов отличает, помимо художественного мастерства, глубокое знание предмета перевода, обширный предпереводческий анализ оригинальных текстов. Благодаря им русскоязычный читатель впервые узнает или заново открывает для себя произведения казахского устного народного творчества, казахских жырау: Асана Кайгы, Бухара жырау, Ахтамберды жырау, Шалкииза, Доспамбета и др.; Абая, Шакарима, Жамбыла, М. Жумабаева, а также современной (для того периода) казахской литературы: М. Макатаева, Т. Молдагалиева, А. Ахметова, К. Мурзалиева, Г. Каирбекова.

4. Подходы к переводческой деятельности: западно-ориентированный и традиционный подход «советской» школы. В рамках данной части курса перед будущими специалистами-переводоведами ставится задача выявления частных и общих тенденций, сходства и различия обозначенных выше тенденций в науке о переводе, что закономерно предполагает развитие рефлективной деятельности в профессиональной сфере и способствует развитию навыков критического мышления, выполнения процедур анализа и синтеза в тесной связи с профессионализацией. В целом, представляется необходимым ориентировать магистрантов на основополагающее положение, высказанное еще O. Kade: «Под переводом в широком смысле мы понимаем включенный в двуязычную коммуникацию (и вместе с тем в сложное, общественно обусловленное сочетание языковых и внеязыковых факторов) процесс, который начинается с восприятия исходного текста ... и заканчивается реализацией текста перевода .... Важнейшей фазой этого процесса является смена кодировки ИЯ → ПЯ, которая из-за своей функции в коммуникативном акте подчиняется

определенным условиям и может быть обозначена как перевод в узком смысле» (Kade 1968: 199)

***Вторая, методологическая часть вышеназванного курса, включает такие переводоведческие проблемы*:**

Механизмы переводческой деятельности (западная и советская традиция). В рамках рассмотрения данной проблемы необходимо отметить сближение вышеуказанных традиций: так, изучение социо- и психолингвистических аспектов переводческой деятельности позволяет найти точки соприкосновения и вместе с тем специфичные для каждой переводоведческих школ подходы. Так, например, нельзя не отметить такой общей позиции, как исследование метакоммуникативной деятельности переводчика, проникновение в глубинную семантику в процессе перевода и пр. Важным является и то, что в настоящее время процесс конвергенции условно выделяемой западной, постсоветской и собственно казахстанской школ переводоведения находится в поле таких проблем, как исследование личности переводчика, ср.: «Профессиональный переводчик, являясь, по нашему мнению, элитарной языковой личностью, понимает, что решающим фактором его деятельности в процессе перевода иноязычного произведения на язык принимающей культуры является снятие сложностей восприятия инокультурного фона произведения. Принимая этот фактор за отправную точку, переводчик изучает текст оригинала с культурологической точки зрения, акцентируя внимание на возможности адаптации текста к принимающей культуре «внутри текста» и «за текстом». Сущность ассимиляции текста, национальный лингвокультурный колорит произведения, неизбежность появления новых смыслов порождают метатексты (предтексты, интертексты, послетексты и др.), которые предваряют, дополняют и поясняют текст автора. … Создавая переводческую инфраструктуру вокруг текста, переводчик прогнозирует возможности восприятия текста любым среднестатистическим читателем, предвосхищает возможные вопросы и программирует проекцию авторского текста в принимающей культуре» (Пластинина, 2016: 50).

Основные переводческие стратегии в интерпретации западных и советских переводоведов. В частности, необходимо познакомить будущих магистров в сфере переводческого дела с такими переводческими стратегиями, как стратегия форенизации, а также ее потенциала в процессе осуществления межкультурной коммуникации через художественный текст как факт культуры и своеобразный код, который должен быть адекватно воспринят носителем иной культуры. Реализация стратегии доместикации, т.е. приближения текста-источника, к восприятию читателя, который является носителем языка-рецептора, также анализируется в рамках данной части нашего курса (Venuti, 2001).

«Камни преткновения» в переводе глазами современных переводоведов, что тесно связано с типологизацией переводческих ошибок. Как указывает, в частности, Н. К. Гарбовский, «В наиболее общем виде типология причин переводческих ошибок при расшифровке системы смыслов исходного текста может быть представлена следующим образом: недостаточное владение языком оригинала. Недостаточный когнитивный опыт. Недостаток знаний об описываемой в исходном тексте области окружающей действительности. Невнимательное отношение к системе смыслов, заключенной в исходном тексте. Непонимание того, что автор говорит о предмете. Неумение различить особенности индивидуального стиля автора исходного речевого произведения» (Гарбовский, 2007). В данном случае предлагается акцентировать внимание на том, что эти проблемы являются достоянием (а также значительным достижением!) переводоведческой традиции, представленной в русскоязычном переводоведении; в рамках западной традиции данному аспекту не уделяется достаточного внимания.

Третья часть курса носит практический характер, направлена на развитие навыков перевода на материале трех языков и состоит из глоссария терминов, а также заданий для самостоятельной работы магистрантов. Акцент должен делаться не только на умении выбора конкретных переводческих методов, но на обосновании переводческой стратегии, исходя из полученных обучающимся новых знаний.

Результаты
Results

Как это было указано выше, авторами было проведено интервью с преподавателями, специализирующимися в сфере теории и практики перевода, относительно необходимости введения данного курса на уровне магистерской подготовки переводчиков. Результаты можно представить в обобщенном виде следующим образом:

1. *Какова, на Ваш взгляд, степень необходимости внедрения элективной дисциплины комплексного характера в систему подготовки переводчиков на уровне магистратуры?*

Как это видно из приведенной диаграммы, подавляющее большинство опрошенных оценило предлагаемый элективный курс как необходимый для подготовки квалифицированных специалистов в сфере переводческого дела.

2. *Какие аспекты предлагаемого курса являются, на Ваш взгляд, наиболее важными?*

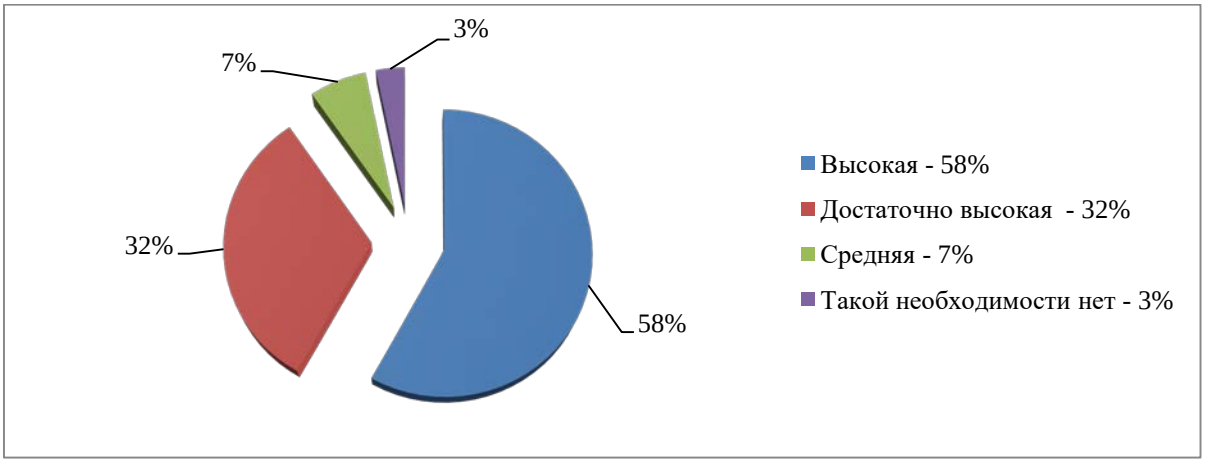

Рисунок 1. **Необходимость внедрения предлагаемой дисциплины (по результатам интервью)**
Figure 1. ***The need to introduce the proposed discipline (based on interview results)***

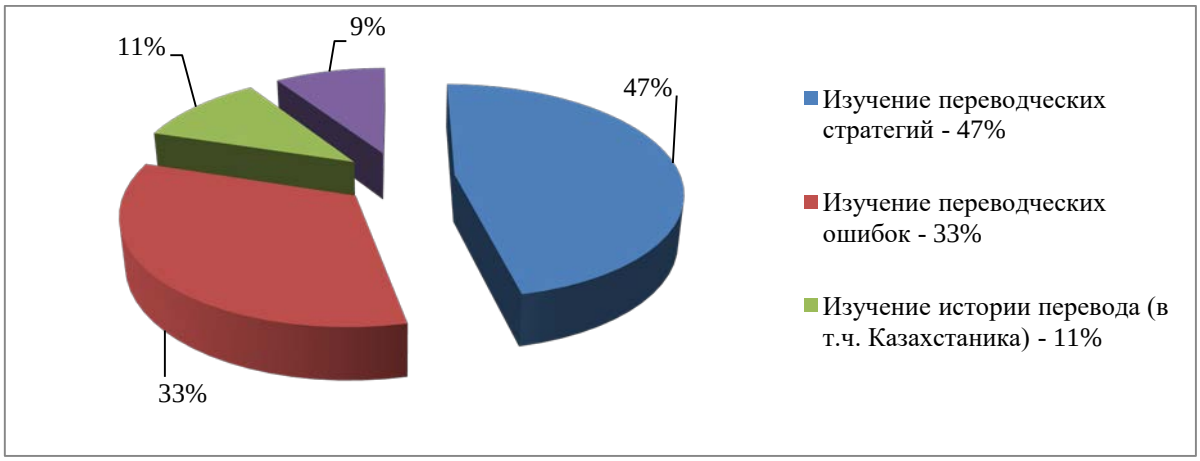

Рисунок 2. **Ранжирование аспектов предлагаемого курса по степени их важности для подготовки магистров Переводческого дела**
Figure 2. ***Ranking aspects of the proposed course in terms of their importance for the preparation of Master of Translation***

На основании интервью выявилась следующая картина: большинство преподавателей (47 %) отдали приоритет изучению переводческих стратегий (однако, несколько настораживающим является тот факт, что большинство опрошенных не придавали особого значения разграничению традиционного для казахстанской реальности подхода, декларируемого советской переводческой школой, и западно-ориентированного подхода). На наш взгляд, это свидетельствует о понимании важности методологической подготовки переводчиков; в то же время, далеко не всеми осознается необходимость выработки у переводчиков умения сопоставлять различные тенденции в переводоведении.

На втором месте по степени важности оказалась эрратология, т.е. теория и практика изучения переводческих ошибок с целью их дальнейшего предотвращения (ее необходимость отметили 33 % опрошенных).

К сожалению, не столь важными признаны изучение истории перевода (11 %) и, как уже говорилось выше, сопоставление переводоведческих тенденций (9 %).

Выводы
Conclusions

Таким образом, мы согласны с И. С. Алексеевой, что для успешности такой динамики важно наличие интереса ученых к развитию переводоведения в других странах. Разные подходы только обогащают развитие науки, международный характер которой не подвергается сомнению. Рассмотрение же конвергентной тенденции в современном переводоведении, появление все большего числа точек соприкосновения трех выявленных нами переводоведческих тенденций позволяет говорить об универсализации данной науки. Методологическая и собственно методическая ценность предлагаемой авторами модели курса заключается в том, что подобное построение способствует выработке критического мышления переводчиков, развития компетенций, необходимых для успешного применения теоретических и практических знаний в профессиональной сфере.

Проведение интервью с целью исследования взгляда преподавателей переводческих дисциплин в рамках данного исследования продемонстрировало, во-первых, необходимость внедрения элективной дисциплины такого рода в процесс подготовки переводчиков на уровне магистратуры. Во-вторых, как показал анализ, практикующими преподавателями четко осознана необходимость знаний в сфере переводческих стратегий, равно как и в сфере исследования и типологизации переводческих ошибок; в то же время, недостаточное осознание важности компетенций в сфере теории, связанных с умением оперировать теоретическими понятиями, предлагаемыми в рамках условно выделяемой западной и советской переводоведческой школы говорит о необходимости пропаганды и всестороннего изучения теоретических аспектов дисциплины; на наш взгляд, такой результат исследования также свидетельствует о необходимости создания предлагаемой Э. Прунчем «понятийной рамки»; «также может быть разработан исследовательский инструментарий, с помощью которого возможно будет адекватно описать, изучить достаточно дифференцированными методами и в то же время

рассмотреть в общем аспекте континуум допустимых решений, самому научиться этому и обучить других» (Прунч, 2015: 26).

Summary

In the frame of tri-lingualism policy declared by the Kazakhstani government at all levels of the education system of the Republic of Kazakhstan, including higher education and post-graduate studies, one of the challenges for teachers is the combination of linguistic structuring of academic disciplines and comparative analysis and generalization of scientific and methodological experience of various translation schools. In our opinion, those schools and trends should be subdivided into three groups: 1) English- and "Eurocentric" approach; 2) Russian school in translation studies, especially in the field of translation theory; 3) translation specialized in the field of Kazakh language. The arbitrariness of this approach is based on such fact as the following: there was a period of time, when we had the Soviet translation studies with clear and consistent approach to translation process. Besides that, English- and Eurocentric trend in translation studies is not homogeneous, too; it includes different approaches and represents various schools in translation studies existing in many countries.

The aforementioned differences have not become yet the subject of scientific analysis in translation studies.

Taking all those factors into account we elaborate the following structure of new course including both historical and theoretical parts: 1. History of translation in English-speaking countries (20-21 centuries); 2. History of translation in CIS (20-21 centuries); 3. History of translation in Kazakhstan; 4. Approaches to translators' activity: Eurocentric and traditional "Soviet" approach.

The second, methodological part of the course includes the following problems in translation studies: 1. Translation mechanisms (Western approach and Soviet tradition); 2. Basic translation strategies (Western and Soviet translators' viewpoints); 3. "Stumbling blocks" in contemporary translation (practical approach); 4. Main types of translation errors.

The third part of the course should be rather practical, aimed at the development of translation skills on the material of three languages. It will consist of a Glossary of terms and tasks for self-study. The focus should be not only on the ability to select a specific translation methods, but the rationale of the translation strategy based on the studying of new knowledge.

In accordance with the main purpose of our research, we have chosen such methods as observation and field study research.

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APPROACHES TO THE DEVELOPMENT OF KEY COMPETENCIES OF THE 21ST CENTURY IN THE NATIONAL RESEARCH UNIVERSITY HIGHER SCHOOL OF ECONOMICS

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Abstract. *The question of transformation of the Russian education, so that it better meets the requirements of the new reality, is more acute than ever. The aim of the study is a system of educational tools that implement individual trajectories in the National Research University Higher School of Economics (HSE) undergraduate program to form the key competences of the 21st century. The subject of the study are the methods of developing key competencies in the implementation of the "Minors" program and the "Bachelor+" program. The study was based on surveys and interviews with representatives of the administration, organizers of minors, organizers of additional programs and students of 2, 3 and 4 courses (634 students). The data were processed by structuring, generalizing and then analyzing. The results of the research revealed an unambiguous positive aspect of the introduction of programs for the development of key competencies, especially communications. A new research question has been formulated. Directions for further research are suggested.*
Keywords: *key competences, competence approach, minor, 4k.*

Введение
Introduction

Мировой опыт исследований в области ключевых компетенций насчитывает уже порядка двух десятков лет. Однако в российском образовании компетентностный подход начал внедряться относительно недавно.

Вопрос о необходимости трансформации российской школы, которая должна отвечать требованиям новой реальности, стоит как никогда остро. Разработка и внедрение стратегических решений ведется по разным направлениям: создание атласа новых профессий (Атлас новых профессий, 2014), внедрение компетентностного подхода в систему образования на всех уровнях, реформа профессиональных стандартов. Начав реформу с высшего образования, фокус плавно переместили к среднему общему образованию.

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Большинство проектов в данной области сосредоточены на изучении и разработке методик оценки, развития и последующего мониторинга компетенций у школьников. Тем не менее, проблема формирования и развития ключевых компетентностей у сегодняшних студентов остается актуальной, так как существует некая напряженность между ожиданиями работодателей и фактическим студенческим бэкграундом. Внедрение стандартов, составление компетентностных моделей выпускников и сам учебный процесс в рамках только одного направления подготовки не может дать эффективный результат.

Целью данной статьи является описание подходов, направленных на реализацию индивидуальных траекторий в бакалавриате Национального исследовательского университета “Высшая школа экономики” (далее - НИУ ВШЭ) для формирования ключевых компетенций XXI века. К ключевым компетенциям XXI века мы будем относить креативное мышление, критическое мышление, коммуникативные навыки, кооперацию (Институт образования, 2017b). С целью реализации данного подхода в НИУ ВШЭ реализуется система общеуниверситетских программ, таких как “общеуниверситетские факультативы”, “майноры”, “Бакалавр+” и т.д. Некоторые из них являются частью основных образовательных программ бакалавриата (новая структура бакалаврских программ внедрена в 2014 году), другие реализуются в рамках дополнительного профессионального образования (continuing education) (ДПО).

Новая структура основных образовательных программ бакалавриата НИУ ВШЭ содержит несколько существенных отличий, ориентированных на развитие ключевых компетенций: большое количество часов на изучение иностранного языка (со 2-го курса в программу включены дисциплины, которые преподаются на иностранных языках, участие в программе студенческой академической мобильности); выделение проектной деятельности в отдельный обязательный блок; определение, наряду с профессиональной подготовкой по основному направлению (Major, мейджер), дополнительного профиля (Minor, майнор). Идея майноров и мейджеров была предложена как реформа американского бакалаврского образования в 1910 году (Lowell, 1938). Являясь классическим стандартом для американского образования, система майноров и мейджеров остается новой для российского образовательного пространства (Седова, 2017b). Программа майноров успешно реализуется уже третий год, эффективно выполняя цели, поставленные перед ней администрацией вуза: горизонтальная интеграция студентов всех образовательных программ, развитие коммуникативных навыков, освоение знаний в дополнительной области для получения конкурентных преимуществ на рынке труда. В 2017

году студентам было предложено для выбора 58 майноров, согласно НИУ ВШЭ (2017).

Одновременно с основным высшим образованием студентам предоставляется возможность получать дополнительное профессиональное образование. Формируя индивидуальную образовательную траекторию, студенты могут использовать этот ресурс для развития компетенций, необходимых для будущей профессиональной деятельности и саморазвития.

Московский кампус НИУ ВШЭ предлагает более 500 дополнительных профессиональных программ (programs for continuing education), реализуемых 45 подразделениями (в том числе 9 научными подразделениями). Эти программы охватывают широкий спектр направлений, реализуются в разных форматах с использованием различных методов и технологий обучения. Обучение по программам ДПО ведут опытные преподаватели бизнес-образования, а также представители работодателей, в том числе топ-менеджеры лидирующих на международном и российском рынках компаний.

Следует отметить, что студенты имеют большую нагрузку в рамках основной образовательной программы и совмещать учебу с дополнительным образованием - непростая задача. Существует проблема выбора программ, которые окажутся наиболее полезными и эффективными для получения на этапе выпуска из университета знаний и формирования компетенций, соответствующих ожиданиям студентов, их родителей и работодателей. Далеко не каждый студент 1-2 курсов способен самостоятельно решить эту задачу. Так, по данным опросов, 67,3 % студентов испытывали сложности при выборе майнора (отсутствие релевантных источников информации о новой, для студентов, программе; отсутствие четкого алгоритма записи на майнор; проблема с определением интересующих областей и т.д.), 18,9 % выбирали так, как сказали родители (Седова, 2017а).

В 2017 году в НИУ ВШЭ стартовал проект “Бакалавр+”, в рамках которого создаются программы ДПО, предназначенные специально для студентов. В настоящее время в московском кампусе университета реализуется более 50 таких программ. В основе проекта лежит идея разработки пула программ, наиболее эффективных и востребованных студентами, а также создания наиболее комфортных условий для получения дополнительного образования наряду с освоением основной образовательной программы. В первую очередь, это программы по изучению иностранных языков, анализу данных, практике делового общения, тайм-менеджменту (time-management), самопрезентации, а также программы, направленные на повышение финансовой и цифровой

грамотности. Программы разработаны с учетом результатов опроса абитуриентов во время приемной кампании летом 2017 года. Была получена информация о том, какие программы ДПО им интересны. Для студентов НИУ ВШЭ действует система скидок на оплату обучения по программам ДПО. Группы обучающихся и расписание занятий формируются с учетом того, что московский кампус НИУ ВШЭ территориально распределен. Освоенные программы ДПО будут включены в приложение к диплому.

Реализуемые в НИУ ВШЭ проекты, такие как “Майнор”, “Бакалавр+” и т.д. - совершенно новые для образовательной среды, поэтому одной из первоочередных задач администрации университета является выявление проблемных моментов, связанных с организацией, продвижением и эффективностью реализации. В связи с этим возникает необходимость в получении информации от всех стейкхолдеров (stakeholders) процесса (группы заинтересованных, в процессе, лиц). В интересах исследования были рассмотрены только стейкхолдеры внутренней среды университета: администрация, организаторы содержательной компоненты программ и студенты.

Исследование проводилось в виде кейса, так как основной задачей являлось описание текущих процессов и взаимосвязей. Основными методами исследования являются детализированные интервью и опросы. Интервью проводились, в первую очередь, с представителями администрации и преподавателями, которые разрабатывали и реализовывали майноры и дополнительные программы. Были опрошены и проинтервьюированы 8 представителей администрации, 11 организаторов майноров. Интервью проведены в июне-декабре 2016 г. В опросах участвовали 634 студента 2, 3 и 4 курсов бакалавриата. Опросы студентов были проведены в январе 2017 и январе 2018 года.

Теоретическая рамка
Theoretical Framework

В основе подходов по построению индивидуальных образовательных траекторий, реализуемых в НИУ ВШЭ, лежат принципы компетентностного подхода в образовании, в части формирования и развития ключевых компетенций (key competence) и концепция самодетерминации (self-determination, self-determination theory, SDT) в части мотивации.

Становление новой парадигмы результата образования, как ключевой компетенции, проходило в три этапа (Зимняя, 2006). На первом этапе в 1965 году Н. Хомским (Chomsky, 1972) было введено понятие “компетенция”, а далее категория ветвилась, обрастая новыми смыслами и приложениями.

Появилась потребность в разделении смыслов понятий “компетенция” и “компетентность”.

На втором этапе основным вкладом можно считать работы Дж. Равена (Raven, 1984), который выделил 37 видов компетентностей и впервые указал на связь с мотивацией, проведя равенство между компетентностью и мотивированной способностью индивида.

Третий этап, начавшийся в 90-е годы XX в., можно характеризовать как критический для понимания важности компетентностного подхода в международном контексте. Тезисы, являющиеся предпосылками для выделения ключевых компетенций, были озвучены Жаком Делором (1996): “четыре базовых принципа, положенных в основу образования, - учиться жить, учиться познавать, учиться делать и учиться сосуществовать”. Таким образом ключевые компетенции рассматривались как некий эталон повседневной жизни в социальном контексте. Причем очень важным для понимания ключевых компетенций было определение их как дополнительных к специфическим профессиональным. Б. Оскарссон уточняет, что обязательными являются способность эффективной работы в команде, планирование, разрешение проблем, творчество, лидерство, предпринимательское поведение, организационное видение и коммуникативные навыки. Активное участие в разработке и внедрении принципов компетентностного подхода стали принимать различные институциональные образования на государственном уровне (Gordon. 2009; Kearney, 2011; OECD, 2009; Oates, 2001; Институт образования, 2017).

Российский опыт изучения компетентностного подхода в образовании, включая теорию и практику реализации, описан довольно детально (А. К. Маркова, В. И. Байденко, И. А. Зимняя, А. В. Хуторской и др.).

Концепция самодетерминации, разработанная Эдвардом Л. Диси и Ричардом М. Райаном (Deci, 1975, 1980; Deci & Ryan, 1985, 2000, 2002, 2008) особенно интересна с позиции объяснения инструментов внутренней и внешней мотивации индивида. В отличие от других содержательных теорий (А. Маслоу, Р. Уайта, Дж. Боулби, М. Эйнсворт и др.) потребность в автономии является совершенно новым компонентом. Двумя другими, не менее важными для модели базовых психологических потребностей, как источника внутренней мотивации деятельности, являются компетентность и принятие, т.е. потребность в связях с другими людьми (relatedness).

Мотивация студентов, являющихся субъектами построения индивидуальных траекторий, играет важную роль. Проблема выбора своей образовательной траектории стоит перед большинством студентов. Как понять свои потребности, разобраться с проблемой анализа и верификации информации, проявить самостоятельность и осознанность выбора - вот важные вопросы, которые еще не решены на сегодняшний день. Построение

системы выбора, учитывающей все потребности студентов в саморазвитии - актуальная задача.

Результаты исследования
Research Results

Анализ интервью и результатов опросов позволил выявить несколько проблемных тем, общих для всех групп стейкхолдеров, и в то же время позволил понять область фокусировки каждой группы. Администрация НИУ ВШЭ заинтересована в совершенствовании уже запущенных механизмов, оставив все содержательные вопросы в компетенции организаторов дисциплин. При первом приближении можно выделить следующие общие проблемы: логистическую (так как московский кампус НИУ ВШЭ является распределенным, и имеет более 40 зданий по всей Москве), информационную (здесь можно выделить две проблемы - и отсутствие каналов связи, и недостаточную информированность студентов о существующих источниках информации), проблему подготовленности педагогических кадров (не все программы разрабатываются в компетентностном ключе с ориентацией на стратегические цели стейкхолдеров).

Администрация НИУ ВШЭ проводит регулярный мониторинг проблемных вопросов. Проблемы оперативно решаются. Так, была устранена проблема, связанная с процессом выбора майноров студентами. Разработана и внедрена новая методика выбора, что позволило снизить число студентов, недовольных организацией процесса выбора на 84 %. Теперь на возможность записаться на майнор влияет не скорость, с которой студенты нажимают на кнопки в информационной образовательной среде НИУ ВШЭ, а успеваемость и ранжирование майноров по привлекательности для каждого уникального студента.

Студенты владеют информацией о важности ключевых компетенций для будущей профессиональной и социальной деятельности (77,5 % респондентов ответили утвердительно на этот вопрос). При этом 46,6 % - считают ключевые компетенции крайне важными.

При ответе на вопрос с просьбой оценить собственный уровень развития ключевых компетенций (нулевой, начальный, базовый, продвинутый, экспертный) зафиксированы результаты, представленные на диаграмме (рисунок 1). Выше всего студенты оценили свои способности в коммуникации (48,3 % -продвинутый уровень), затем в критическом мышлении (41,9 % - продвинутый уровень). Что касается кооперации, то тут уже более заметно смещение в сторону базового уровня (31 % - базовый

уровень, 37,8 % - продвинутый). И самые низкие показатели студенты поставили себе по креативному мышлению (25,6 % - начальный уровень, 40,1 % - базовый уровень, 26,7 % - продвинутый уровень).

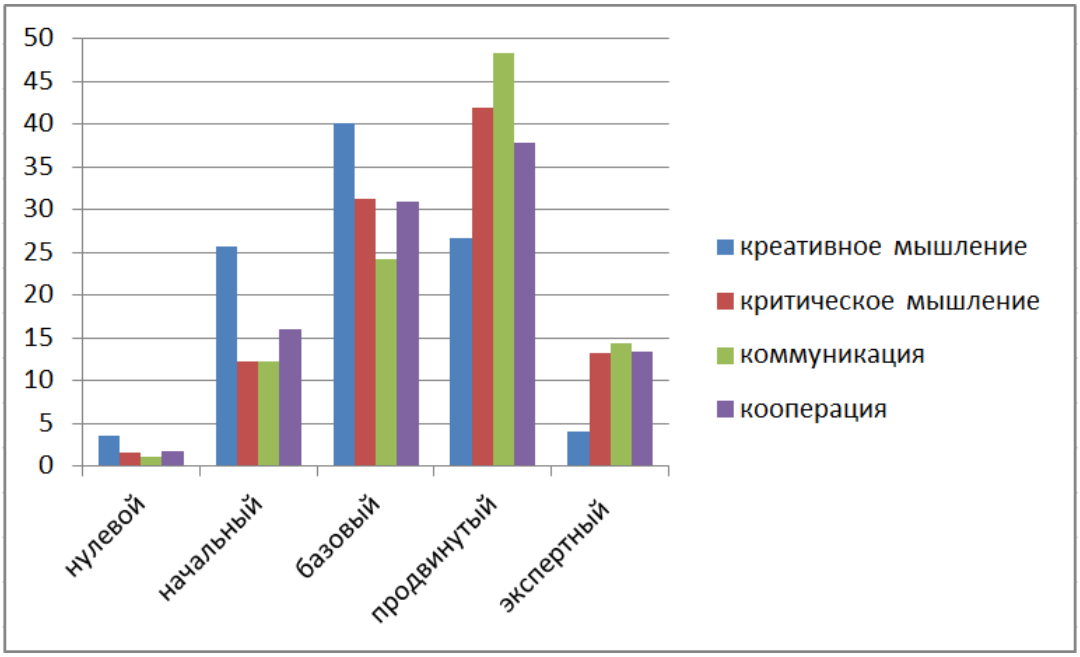

Рисунок 1. **Результаты самооценки уровня развития ключевых компетенций у студентов**
Figure 1. ***Results of self-assessment of the level of development of students's key competencies***

Не смотря на то, что почти половина студентов оценили уровень своей компетенции как продвинутый или экспертный (за исключением креативного мышления), 91 % опрошенных студентов ответили, что нуждаются в развитии ключевых компетенций XXI века. По их мнению, этому максимально способствуют проектная деятельность, майноры, основная образовательная программа, внеучебная деятельность и дополнительные профессиональные программы (рисунок 2).

По мнению студентов, важно, чтобы в разные составляющие образовательной программы включались тренинги, деловые игры, работа над проектами, дебаты, деловые переговоры, нестандартные кейсы. Также важной представляется внеучебная деятельность - студенческие организации, волонтерство (volunteerism).

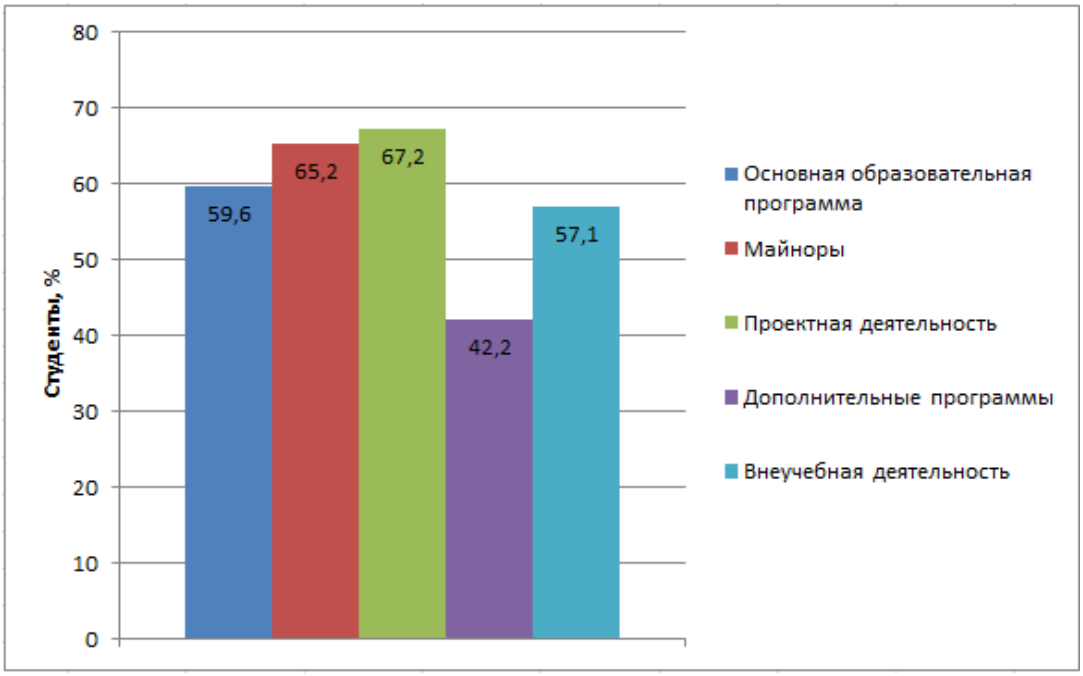

Рисунок 2. **Виды деятельности по важности влияния на развитие ключевых компетенций (по оценке студентов)**

Figure 2. ***Kinds of activities on the importance of influencing the development of key competencies (according to students)***

Работа с данными, полученными в результате интервью и опросов, позволила зафиксировать ряд проблемных моментов. Исследование показало, что более 50 % опрошенных студентов не знают о возможности одновременно с высшим получать дополнительное образование; 90 % - не имеют информации о действующей системе скидок на оплату обучения по программам ДПО для студентов НИУ ВШЭ; 80 % - не знают, на каком ресурсе корпоративного сайта НИУ ВШЭ размещена информация о дополнительных профессиональных программах и проекте “Бакалавр+”.

Важно то, что 70 % студентов, принявших участие в исследовании, выразили желание стать слушателями программ ДПО НИУ ВШЭ, 4 % сообщили о том, что ими уже являются.

В первую очередь, интерес студентов вызывают программы ДПО по изучению иностранных языков: английский (51 %), немецкий (41 %), испанский (27 %), итальянский (20 %), китайский (20 %), а также французский, японский, арабский, иврит. В рамках ДПО студенты хотели бы развивать коммуникативные навыки (51 %), навыки проектной (35 %), командной (31 %) работы, повысить финансовую (59 %), правовую (43 %) грамотность, получить знания в области менеджмента (40 %), психологии (37 %), экономики (34 %), культуры и искусства (20 %), дизайна (20 %).

Также отмечен интерес к изучению языков программирования, информационной безопасности, робототехнике. Именно такие программы предлагаются студентам в рамках проекта “Бакалавр+”. С момента старта проекта обучение по программам ДПО прошли более 500 студентов НИУ ВШЭ.

Заключение и рекомендации
Conclusions and Recommendations

По мнению студентов, формирование ключевых компетенций XXI века является неотъемлемой частью получения высшего образования, и это становится определенным вызовом для современных образовательных систем. Не смотря на инертность и консерватизм, присущие всем системам образования, в ближайшее время реформы потребуют полного изменения структуры образовательных программ для формирования компетенций будущего. Поиск эффективных подходов для решения стратегических задач образования будет актуальным как никогда.

Результаты исследования подтвердили важность поиска и применения новых подходов к развитию ключевых компетенций, совершенствованию существующих программ под запросы студентов и работодателей.

Также выявлена проблема недостаточного информирования студентов о возможности получения дополнительного образования наряду с освоением основной образовательной программой, о возможности получения скидки по оплате обучения. Есть необходимость в дополнительном исследовании каналов продвижения программ ДПО среди студентов НИУ ВШЭ в рамках проекта “Бакалавр+”.

Summary

According to students view, the formation of key competences of the 21st century is an integral part of higher education, and this becomes a definite challenge for modern educational systems.

Despite of the inertia and conservatism inherent in all education systems, in the near future reforms will require a complete change in the structure of educational programs to form the competencies of future. The search for effective approaches to solving the strategic tasks of education will be more urgent than ever.

The problem, related to poor informing of students about the possibility of obtaining additional education along with mastering the basic educational program, has been identified. There is a need for an additional study of the channels for promotion DPE programs among HSE students within the framework of the Bachelor + project.

It is important to search for and apply new approaches to the development of key competencies, to improve existing programs for the requests of employers and students.

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