

# Rural Environment. Education. Personality. (REEP)

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### Foreword

The Institute of Education and Home Economics of the Faculty of Engineering, Latvia University of Agriculture organizes annual international scientific conferences **Rural Environment**. Education. Personality (REEP). Authors of the articles are from Estonia, Latvia, Lithuania, Finland, Poland, Canada. Totally 17 education establishments are represented in the Proceedings.

**Aim of the Conference:** to look for solutions, exchange ideas and highlight topical problems on the 21<sup>st</sup> century education tendencies in the context of ecology of education, competence, life quality in home environment, psychology, didactics, career development and vocational education.

#### Thematic groups of the articles:

- Sustainable development of rural schools' environment, ecology of education
- Education for getting competence
- Life quality in the context of home environment, home economics, household, consumer science
- Development of vocational education and career development
- Psychology

The Conference is looking for perspectives of education and training systems considering changes in rural social environment imposed by changes in a society both in global and local scope.

The scope of **ecology of education** comprises themes on pedagogues efforts and contribution relating to sustainability in the context of environment (social, natural, etc.), humanization and democratization of education; cross-school mentoring as a facilitator of sustainable development of rural schools; globalisation process in the society and changing of rural cultural environment and population; emphasizing the meaning of the conceptions of *an open school, an open humanistic target oriented educational environment*, evaluating the experience of distance learning in the world in the urban and rural educational environment; teacher's responsibility and professional possibilities to promote the interrelations between students'creativity in classroom and actual educational principles.

Education for getting competence focuses on competence based education including citizenship education for getting competence in higher education, kinds of competence and professionalism. Citizenship education includes the nature and practices of participation in democracy, the duties, responsibilities and rights of individuals as citizens; and the value to individuals and society of community activity. Preparing students for citizenship involves developing relevant knowledge and understanding as well as encouraging the formation of positive attitudes toward being a citizen.

The humanistic concept of education is at the heart of the modern teacher training. School needs an educated, independent-minded and creative teacher. The basic strategy of education today should be a subjective teacher development, the development of his professional identity and individuality.

The acquired results of the research in *professional competences of future Home Economics and technology teachers during pedagogical parctice* have revealed the following tendencies: trainees are good at motivating and supporting their learners; students apply various techniques, methods and strategies of evaluation of learners' achievements; trainees have developed a good competence of managing the teaching/learning process; teacher mentors have positively evaluated students' competence of planning the content of the subject; future technology teachers attach great significance to lifelong learning.

There are studies about interrelations between multicultural environment and teachers' readiness in the implementation of cross-cultural education in primary school; also about communicative competence as one of the fundamental competences. Communicative competence is historically related to cultural norms, including the ability to read and to understand informative texts and operational texts, prize grammatical correctness and expressive speech.

Articles on **life quality in the context of home environment** discuss the role of philosophy(ies) in home economics practice. What is it, why do we need one, what role does it serve, and what should it include?

Researchers emphasize rapid changes in diets and lifestyles resulting from industrialization, urbanization, economic development and market globalization are having a significant impact on the nutritional status of population. In recent years increased the consumption of unhealthy foods among adolescents, especially sweets, sweetened soft drinks and fast food meals. Availability of foods in school shops and cafeterias significantly favored the incorrect diet of schoolchildren. There is a need to improve the food supply available at school taking into account the rules of proper eating. It will results in better nutritional status of young people and their better achievements in the learning process.

Pupils' learning skills are one of the most important human qualities for achieving the set aims. Accordingly, in the personality formation process it is essential to develop the qualities which facilitate the consolidation of pupils' learning skills as a characteristic trait in primary school.

The authors also valuate the importance of handicraft to improve the life quality of the families. After the analysis of the obtained data, it could be concluded that pupils practically apply the acquired household skills in their everyday life, they are interested in traditional crafts and willing to train traditional kinds of crafts in creative workshops. To promote the interest of pupils about traditional crafts and foster cooperation among schools and public organizations in acquiring household education, the following suggestions have been provided: to organize open workshops at schools, to ensure that pupils attend craft workshops and enterprises, to ensure cooperation among schools, to improve the forms of organization of learning.

**Development of vocational education and career** research items comprise the nature of problem–based learning: the aspects of epistemological competence, professional action, interdisciplinary understanding, trans-disciplinary learning and critical contestability; the significant and topical problems connected to the unemployed problems related to education, the lack of diverse new methods for ensuring a more effective study process of the unemployed; the factors hindering the process of search for jobs ascertaining the reasons and features of character of customers that hinder a successful search for a job as well as opinions of individuals whether they are informed about available services of a career consultant; the educational requirements for employees to work on labour protection specialists.

Such problems of the unemployed as social exclusion, lack of communication, which hamper the individual self-realization and making of contacts, are becoming increasingly topical within the society. It was concluded that the process of successful search for a job requires active cooperation of the unemployed, and assistance of a career consultant is also necessary.

Articles about **psychology** comprise discourse of scientific and cultural processes, including social psychology, social constructivism and social epistemology approaches in education.

## Teachers, lecturers, master and doctoral students have comprised a wide range of themes providing diversity and topicality of the conference.

Many thanks to the authors, reviewers and organizers for their contribution on international scientific level.

On behalf of the Conference Organizing Committee

Associate professor Vija Dišlere Institute of Education and Home Economics of the Faculty of Engineering, Latvia University of Agriculture

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# Ecology of education, sustainable development of rural schools' environment

#### RURAL STUDENT AND TEACHER IN THE MODERN GLOBAL WORLD: ASPECTS OF TEACHER'S PROFESSIONAL COMPETENCE

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**Abstract:** *The importance of this issue* is determined by globalisation process in the society and changing of rural cultural environment and population in different ways. The dynamic changes bring forward more multiform and complicated requirements for students, teachers and the whole system of education as well. These developmental tendencies in rural environments raise a necessity to treat education more and more thoroughly as a personality upbringing process and process for promoting social development and equity in a linguistically and culturally diverse world.

*Aim of the study is* to identify general problems in rural schools and to analyze some aspects of rural school teachers' professional competence in order to provide acquiring the education content and to develop students' local cultural identity in the modern global world as well as to form rural schools and classes as cultural organizations in local cultural environment.

*Theoretical framework* of the study is based on different theories of teaching/ learning as a cognitive and communication process. The theoretical assumptions are mainly connected with empirical experience in the stage of basic education.

Keywords: teaching/ learning resource, rural student and teacher, teacher's professional competence.

#### Introduction

We are living in the epoch of information and democratic changes where an important tendency is the awareness of oneself as a part of the society and one's own personality. It concerns to people with special needs, too. Contemporary education's role is not only to be a transmitter of knowledge but also of values based on social and cultural factors. Nowadays we must understand that investing in education is part of solving economic, cultural crises. There is a pedagogical necessity to look after the student's integration into his culture and acknowledge the culture he can see in the environment.

Taking into consideration the diversity of the current rural cultural environment, demographic situation, social circumstances in the families and in the society in the whole rural schools became as a general place for the successful development of personality corresponding to the needs of the students.

Currently the development of a rural school as a cultural environment and even its existence as well as the specific features of a teacher's work depend on several interlinked factors. During the last few years the number of school age children has dramatically fallen down. One of the reasons is the low rate of birth due to the impact of on-going economic processes and the open market. They favour human resource's drifting from rural areas to economically more advanced parts of the country. Each year the number of families that together with their children or without them keeps leaving Latvia for job-seeking for a shorter or a longer period of time. Some children are subjected to regular migration as their parents do part-time jobs in various countries. Also, nowadays certain changes have taken place in the family pattern, for instance, now and then children do not live together with both parents or have even broken up ties with their biologic families; a part of children have the so called status of 'European Orphans' as during their parents absence they stay at grandparents or have guardians. The economic and social standard of families with children strikingly differs in the well-off families with children from the low-income families or even families with a socially unfavourable status. Rural school environment is also influenced by the school financial pattern 'Money follows the child', the geographical position, children's health condition as well as the expansion of a modern teacher's preconditions of competitiveness. The existing viewpoints in society and to a certain extent myths linked with them, for instance, that rural schoolchildren's education quality is lower than urban schoolchildren's education; moreover, teaching- learning process and their skills in rural schools are

much lower; material basis is insufficient; it is easier for a teacher to work or on the contrary, it is harder to do the job responsibilities without books, workbooks and home tasks if they constitute the part of learning tools, it is next to impossible etc.

Thinking about the state long-term development, it should be kept in mind that a school's competitiveness will depend on the link between the education system and market changes and the ability to prepare a human to do jobs in ever-changing conditions within the life time. To promote the survival of rural culture environment and its development it is essential to ensure basic education for children as close to their homes as possible, to preserve the small country schools; to organize such an education system that fosters the development of local culture environment as well as all-round state's economic and social growth (Latvian developmental sustainability strategy up to 2030, 2011). The existence and the quality of rural schools depend on its operation considering each local municipality's, community's needs and opportunities. Without considering the chosen rural school's pattern (united classes, using specific methodology with children of different age, reduced teaching staff, long-distance methodology etc.), the teacher is a decisive figure both as a professional as well as a personality. Although nowadays the teacher is not the only well-educated human in the local community, anyway, the teacher shoulders responsibility to what extent each learner's education is oriented towards his/her own future; to what extent a qualitative pedagogic process enhances each learner's self-development.

*Aim of the study* is to identify general problems in rural schools and to analyze some aspects of rural school teacher's professional competence in order to provide acquiring the education content and to develop students local cultural identity in the modern global world as well as to form rural schools and classes as cultural organizations in local cultural environment.

#### Materials and methods

Content of the study is based on different theories of teaching/ learning as a cognitive and communication process and theories about individual and social culture interaction, theoretical understanding of teachers' professional experience and learning strategies by students for the personality development according to individual needs and opportunities. The theoretical assumptions are connected with empirical experience mainly in the stage of basic education. Empirical observations and the opinion poll of 250 Latvian rural school teachers as well as education managers in various parts of Latvia reveal the awareness of what and what kind of possibilities their schools have; also, they highlight certain problems within the acquisition process of the education content in accordance with 21<sup>st</sup> century demands and needs as well as the necessity to improve the teacher's professional competence in rural schools.

#### **Results and discussion**

According to the statistics of Latvian Ministry of Education and Science about the number of learners and teachers/educators in comprehensive schools, which are located in rural culture environment, currently there are rural schools with several hundreds of learners as well as there are rural schools with 10 learners. Right now there are 15% fewer schools in Latvia than 2 years ago. During the current school-year 291 schools with less than a hundred learners are in operation in Latvia (www.izm.gov.lv/statistika, 2011). Thus, a rural school building (even several buildings) is towering in the surroundings of the village; it can also be a lower structure with the unfolding state flag at it and the children's hustle and bustle makes us judge that it must be a school.

According to empirical observations, rural schools are very different- from schools with parallel classes to schools with unit classes. The classes in rural schools are becoming more and more ethnically and linguistically heterogenic, too. The topicality of the research is connected with the problem that together with students coming from monolingual families, both harmonic bilinguals and students who are gradually becoming strong bilinguals are studying there. Among them there are also asymmetric bilinguals. Teachers need to acquire a new professional competence, i.e., how to work with ethnically and linguistically heterogenic classes.

At the same time, notwithstanding the socio-psychological image of a rural school, its duty is to ensure each learner to obtain qualitative education. The most decisive markers of qualitative education show their knowledge about the world developmental regularities, to apply the mastered skills and knowledge in new situations, to make independent decisions, to work in teams, flexible attitude and creativity as well as emotional intelligence (Maslo, 2008; Grabovska, 2006). In order to make conclusions about rural school teachers' opportunities to help learners to acquire the most appropriate knowledge and skills of 21st century for a human, the need to develop his/her own professionalism, it was essential to explore local educators'/ teachers' evaluation of their duties and responsibilities in the local culture environment as well as in general, in the education system as a whole; also, how these traits might impact their own professional performance. The results of the rural school teachers' opinion poll affirm the following trend: on the one hand, a  $\frac{1}{2}$  of the respondents regard their school material basis is sufficient in order to carry out the planned tasks. On the other hand, exactly a 1/2 of the respondents affirm that their school has a partly sufficient material basis. The most vital problem is the out-dated equipment, computers and software (IT programmes); the Internet is not available; insufficient number of books in the school library, teachers' low salaries that hinder their own further developmental education; as a result, they are not able to share their own latest experience with learners/ pupils. Teachers are greatly concerned about the children's health condition, the low developmental level of speech and the language, their low learning motivation, social behavior as well as insufficient parents' support and collaboration with educators and the school staff in particular. 23% respondents assert that an essential factor that hinders this collaboration and developmental positive relations are due to the specific rural culture environment, i.e., each pupil knows nearly everything about their teachers (the family lifestyle, economic or social standard in the community). According to 34% respondents' answers, a rural teacher has an average level prestige in the local community. On the one hand, 98 % teachers' viewpoint is linked with disbelief in their school's sustainability and their place in it; that in its own way hinders professional activities. On the other hand, school managers' viewpoint differs. They share the opinion that they themselves as well as teachers are ranked in the local community as they are municipality members, governmental and nongovernmental as well as culture centre representatives etc. In order to be competitive, a rural teacher is forced to learn,to write projects, to look for new opportunities but it is connected with going to Riga or to the regional largest town. As the rural infrastucture and transportation is limited, it causes an extra stress and expenses, as well. Insufficient knowledge and skills of English often hinders the participation in international projects as well as reading professional literature. The obtained information within the process of carrying out the observation and the opinion poll assists to come to definite conclusions about certain aspects of rural teachers' professionalism as well as the most crucial problems accordingly. One marker of the teacher's professional competencies is the skill to create or choose the study programme. The study programme is a part of the education programme where according to education level, type of education, target group, the subject study content involves its aims and tasks, the study content itself, its planning, tips and hints about study tools, methodological resources as well as the ways of its acquisition, methods, criteria and procedure (Pedagoģijas terminu skaidrojošā vārdnīca, 2002). 88% rural school teachers lack their own individual study programme that proves the average professional level.

Teachers justify their attitude to individual study programmes because they have the State Subject Standard and the sample study programmes offered by the State Education Content Centre. 7% respondents acknowledge lack of knowledge how to create an individual study programme, 52% respondents are not aware of its necessity, 41% answers reveal teachers' fears whether pupils, on finishing class 3, class 6 and class 9, will successfully pass state examination tasks in case they have covered different study programmes. If a teacher takes another author's study programme without a grain of salt, it might cause problems linked with other features. Accordingly one of them might be teachers' attitude to education, for example, 1/3 of the respondents associate rural schoolchildren's education with general, even distant global education aims and tasks whereas without devoting appropriate attention to knowledge and skills that help to create a positive attitude to the particular culture environmental its culture. Awareness of the world culture and participation in the worlds' latest cultural developments begins with perfect knowledge of their own environment and its culture, knowing myself and the surrounding people. (Маслова, 2001; Tilla, 2005). Currently rural school education environment has become both the developmental environment of the personality as well as the developmental environment of rural society. Rural schools take the responsibility of its further development as well as the developmental sustainability of the whole local rural society. On the one hand, rural school education environment influences the on-going processes in the outer vicinity. On the other hand, the outer environment also impacts the school culture environment as well as each pupil's developmental personality (Katane, 2005). In various country regions pupils' education needs vary. They depend on diverse factors, for instance, on each pupils' individual abilities, on the rural school's financial budget and pupils' family values scale/preferences etc. As any school is a part of the particular community, it should not operate separately deprived from the surrounding environment and its culture. The concept culture environment involves not only the spiritual values as a whole relating to one and the same period of time and area with its common typical features; it also involves an interactive dialogue and interconnection among pupils, teachers and the local society. One of the rural school teacher's professional issues is in the global world to help each pupil acquire the world's culture heritage, the traditional ethnic culture, even the culture that has historically developed in its definite social environment. In rural culture environment social and labour culture are linked in a united system, including learning culture. It includes nature, historical landmarks, architectural buildings as well as attractive sights with its mansions, parks, churches and graveyards, priests' dwellings, schools, shops, chemist's, rural district council house, windmills, watermills, manufactory and industry, pubs with a post-office, bridges and housekeeping (Čekstere, A., Smirnova, 2011). Culture is associated with understanding of culture symbols, language, objects etc., therefore an individual's behavior, interaction within a definite culture environment is linked with proper understanding of the sign system in order to make contacts with others belonging to the particular culture environment (Anspoka, Silina- Jasjukēviča, 2008). According to the theories about a personalities development in a definite culture environment (Hall, 2002; Маслова, 2001; Damen, 1987) more attention should be focused on the rural culture environment and mastering its culture phenomena because they are a pupil's learning and educating means. Rural school teacher's professionalism is not only based on pedagogical and psychological theories; it is also a skill to organize pupils' regional studies and preservation of culture heritage regardless the specific features of the subject. Patriotism or love of Fatherland, love of the nation, loyalty to the native country, nation and eagerness to benefit the native land are not acquired like an axiom, it is the question of sound attitude (Damen, 1987) that can appear in actions. Deeds are better than words. The research works with a definite study task, the analysis of the obtained information, its comparison, its structuring promotes a thorough understanding of the surrounding world as well as its developmental regularities; at the same time they motivate the pupil to be responsible for the place, he was born, lives and plans to be beneficial there (Hall, 2002; Damen, 1987).

In order to master culture values in the pedagogical process, sticking to systematization and with the holistic approach, it is necessary to be in conformity with different subject programmes, to avoid unnecessary reviews or superficial knowledge about the district culture and its links with ethos and the world culture. The necessity for texts with the culture background in study programmes is actualizing. On the one hand, in the pedagogical process a text is the basis of communication; on the other hand, it is a didactic unit when culture signs in communication become of great significance. Pupils learn to understand various symbols, the semantic meaning of words, masters to express sound attitude to the surrounding world, to keep to proper speech and behavioral etiquette and its patterns etc. (Hall, 2002). It is essential to include in the study programmes not only common values of mankind but community values as well; this acquisition of culture values should be carried out in real life activities at school and outside the school building, for instance, to involve community representatives, arts and craftsmen, folklore story-tellers, children's parents and grandparents as well.

'Culture texts', i.e., folk-tales, legends, fairy-tales, works by local writers and poets, descriptions of historic events, information about the geographic location, local businessmen and their business plans, local council reviews etc. are the basis for the acquisition of all study subjects content in accordance with the State Standard for basic schools or secondary schools. It is also the means of developing a pupil's socio- cultural competencies that unfold in the recognition of the world he/she lives, awareness of each ethnos, each individual's world outlook, traditions, habits that appear in his/her behavior while interconnection with others; also, different ethnos have common as well as differing features; it means in a multicultural society tolerant attitude to racial diversity is essential; also, the language is not only your own ethnos spiritual heritage; it is also the source of acquisition of world cultures, customs and traditions (Anspoka, Siliņa-Jasjukeviča, 2008).

Half of the respondents admit they lack knowledge how to plan a meaningful lifetime further development of their education in order to work and satisfy the needs accordingly to a definite culture environment. Moreover, the attendance of the majority of courses, seminars etc. is casual; teachers intermittently develop their knowledge in various fields and places etc. but it does not provide a holistic outlook about things. Rural teachers are eager to receive more information about teaching/learning process in united classes, about educating children with greatly differing value system, with special needs. Evaluating the further education course and the content of seminars, teachers object to theoretical sessions as they find them useless. On the one hand, the teachers are right because they can master the theory on their own but on the other hand, insufficient evaluation of the theoretical background may cause casual planning of the pedagogical process, conducting lessons as well as assessing the study process and the results; in other words, teachers take the risk to fail the study process. Only the unity of the theory and practice can foster target full problem solutions in definite conditions; moreover, it can enhance a more thorough understanding of the content as well as promote the interconnection of facts and causes to such an extent that a pupil is better-motivated to use accordingly. Performing activities conscientiously, his/her interest, confidence, emotional experience to assess his/her knowledge, skills, attitude have become as personalized meaningful values. According empirical results important task for further education is to help to teachers to understand how to better include students with different needs in the general schools, to organize qualitative pedagogical process with students with different needs and abilities, to cooperate with colleagues work in teams, cooperate with parents and specialists (medics, social specialists, psychologists), local government representatives. Basic school pedagogy process in rural environment shows some problems how to organize pedagogical process for students with special needs, to work simultaneously with students of low educational level and talented students. It demands understanding of the inner differentiation of work, understanding of language as a aim and as a mean in educational process, visualization of the information in the pedagogical etc. Sometimes we can read about inclusive education as a myth that inclusive education refers only to children with special needs. Inclusive education is not a placement. It is should be happen in every classroom. It is a good pedagogy (Rychen, Tiana, 2004).

As culture environment is a value itself that favours the formation of a personality, then it should stimulate pupils' spiritual activity, promotes his/her interest to explore and fosters to master the content of various subjects in mutual interconnection as well as to shoulder the responsibility for the study results.

#### Conclusions

- Nowadays rural school educational managers and teachers should enhance their awareness in several positions, to be exact, they should be aware that good education is associated with self-development. Teachers' professional competencies, his/her psychological and social maturity to work in a rural school means highly qualitative work to make the school like an 'enlightenment palace' for the local community in its direct and indirect meaning.
- In order to ensure each individual's belonging to a certain district culture environment and the environment created by the individual himself, to help to recognize the individual culture place among the other culture environments, to assist to instill in this environment as well as to feel the belonging to it, to perform activities in the directions he/she can develop their own self-esteem; the appropriate education process should have intersection and holiness with integrated and consecutive various subject content in order the pupil discovers the world and his/her own culture environment with its traditions, landmarks and sights, ethnography, language and dialects.
- Teacher training and further education should be enforced so that the teacher can obtain the ability to find interconnection among different subjects, to see that within the pedagogical process as a whole, systemic traditional culture values of the district can be acquired without losing its contacts with ethnos, the world etc. culture values. It is essential to ground the acquisition of traditional culture in real life activities outside the school building, thus, involving representatives of folksong and dance groups, arts and craftsmen, story-tellers, children's parents and grandparents as well.

- One of the most important teacher's competence is to teach to use language not only as a subject but as a mean for learning content of different subjects, as a mean for express thoughts and emotions and communicate with others to arouse awareness of the role of the language in the development of student's personality, to preserve national identity and to promote a crosscultural dialogue.
- One of important resource and aid are information technologies. Questions are- what is the quality of application, how determined, complete and creative this offer is used; do people who works at pedagogical process have enough knowledge's and skills, which computer programs are the best for effectiveness every days activities and for aim achieving etc.
- As regards the professional competencies, great attention should be paid to rural school teacher's skills to plan and carry out the pedagogical process in a small unit class; also, in a heterogenous class in accordance with different viewpoints; to plan and carry out meaningful lifetime/lifelong learning; to collaborate with other colleagues at the school as well as with the schools in the neighbourhood, with the educators' support staff as well as the local and regional council etc. to ensure a consecutive acquisition of the study content. Much attention is paid to the teachers' emotional and psychological state in a multicultural environment, the structure of lessons as a form of learning and the traits of the teacher's leadership, the teacher's competence to organize individual programs, different forms of unit classes, work with homogenous and heterogeneous groups.

#### References

- 1. Anspoka Z., Siliņa- Jasjukēviča (2008). Etniskā kultūra daudzkultūru izglītības nodrošināšanai: Eiropas Savienības un Latvijas kultūras un izglītības politikas dokumentu analīze (Ethnical culture for multicultural education: analyze of European Union and Latvia documents for the culture and education policy). ATEE conference "*Teacher in the 21st Century: Quality Education for Quality Teaching*", Riga, LU. (In Latvian)
- Čekstere A., Smirnova O. (2011). Vides un ilgtspējīgas attīstības mācīšanās rokasgrāmata studentiem (Environment and sustainability development. Handbook for students). [online]
   [30.11.2011]. Available at <u>http://www.geo.lu.lv/vides\_izglitiba</u> (In Latvian)
- 3. Damen L. (1987). *Culture Learning: The Fifth Dimension on the Language Classroom*. MA, Addison-Wesley.
- 4. Grabovska R. (2006). *Ilgtspējības principa īstenošana skolotāju izglītībā*. *Promocijas darba kopsavilkums*. (Implementation of the Principle of Sustainability in Teacher Education. Doctoral Thesis). Daugavpils, DU. (In Latvian).
- 5. Hall J. K. (2002). *Teaching and Researching Language and Culture*. London, Longman/Pearson.
- 6. Hirsto L. (2001). *Children in their Learning Environments: Theoretical Perspectives*. University of Helsinki, Unit of Educational Psychology Reports.
- 7. Katane I. (2005). Rural School as Multidimensional Education Environment: Conceptual Model in Aspect of Education Ecology. Proceedings of the Fourth International Conference *"Person. Color. Nature. Music"*, Daugavpils University, Daugavpils, Latvia, pp 173-188.
- 8. Latvijas ilgtspējīgas attīstības stratēģija līdz 2030. gadam (Strategy for Latvia Sustainability development till 2030). [online] [30.11.2011]. Available at <u>http://www.nap.lv</u> (In Latvian)
- 9. Maslo I. (2006). *No zināšanām uz kompetentu darbību* (From knowledge to competence). Rīga, LU, Akadēmiskais apgāds. (In Latvian)
- 10. *Latvijas skolas* (Schools in Latvia). [online] [30.11.2011]. Available at <u>http://www.izm.gov.lv/statistika</u> (In Latvian)
- 11. *Pedagoģijas terminu skaidrojošā vārdnīca* (2002). (Dictonary of the pedagogy terms). Autoru kol. V. Skujiņas vad. Rīga, Zvaigzne ABC. (In Latvian)
- 12. Rychen D. S., Tiana A. (2004). *Developing Competencies in Education: Some Lessons from International and National Experience*. UNESCO, International Bureau of Education.
- 13. Tiļļa I. (2005). Sociālkultūras mācīšanās organizācijas sistēma. (Sociocultural learning organization system). Rīga, Raka. (In Latvian)
- 14. Маслова В. А. *Лингвокулторология* (Linguocultural methodology). Москва, Академия. (In Russian)

#### THE EUROPEAN QUALIFICATION'S FRAMEWORK AND THE PILLARS OF EDUCATION FOR SUSTAINABLE DEVELOPMENT

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**Abstract:** On December, 2002, the United Nations General Assembly proclaimed the Decade (2005 to 2014) of Education for Sustainable Development (ESD). ESD is based on five pillars of education: learning to know, learning to be, learning to live together, learning to do, and learning to transform oneself and society. They influence the development of education on a global scale. The European Qualifications Framework for lifelong learning (EQF) is one of the most important documents on a European scale. 8-level Latvian Qualifications Framework (LQF) is developed on this basis. It determines educational level descriptors: knowledge, skills, competence and the appropriate learning outcomes. The aim of research is to evaluate the pillars of education and learning outcomes complementary, as well as experience and problems of the LQF realization. The research is based on the interviews and authors' evaluations, which are accomplished in the formal and informal educational programmes of the pedagogues, work safety and medical specialists.

Keywords: pillars of education, European Qualifications Framework, knowledge, skills, competence.

#### Introduction

One of the most important development problems in the education system in Latvia is inclusion in the European Qualifications Framework for lifelong learning (EQF). The general aim of the European Qualifications Framework (EQF) as a common reference system is to promote the development of lifelong learning principle and foster the international mobility of inhabitants (Referencing of the Latvian Education System..., 2011). The EQF level descriptors are based on learning outcomes – knowledge, skills and competences that are acquired during a certain period of education. Lately universities and colleges of Latvia lay emphasis on defining the description of knowledge, skills and competences, and the methods used to acquire and assess them within study programmes and study courses. It involves evaluation of all study programs within ESF project (European Social Fund's Project Evaluation of Higher Education Programmes and Suggestions for Quality Improvement). The evaluation process revealed some problems related to the approach to learning evaluation and improvement. While carrying out the analyses, the research question was formulated – how the EQF and the LQF reflect five pillars of education and aspiration towards the education for sustainable development.

#### Materials and methods

The research is based on ecological approach to education. It continues the research in ecology of education begun by Latvia University of Agriculture Institute of Education and Home Economics at the end of the 20<sup>th</sup> century. The basic conceptions of the study are transformed from the ecology of human development (Bronfenbrenner, 1977) and bio-ecological perspectives on human development (Bronfenbrenner, 2005). Processes in different ecosystem and chronosystem levels have been taken into account. A comparative content analysis of several document texts has been performed:

- five pillars of education for sustainable development (ESD) learning to know, learning to be, learning to live together, learning to do, learning to transform oneself and society (UNESCO, 2010a, 2010b, 2010c, 2010d, 2010e);
- descriptors defining knowledge, skills and competences in the European Qualifications Framework (Recommendation of the European Parliament..., 2008);
- QUESTIONNAIRE (2011) evaluation criteria (European Social Fund's Project Evaluation of Higher Education Programmes and Suggestions for Quality Improvement).

Interviews and discussions with students and academic staff took place within several study programmes of the Latvia University of Agriculture (LUA):

• master in pedagogy;

- work safety specialist;
- innovation in university didactics for LUA academic staff;
- innovation in university didactics for academic staff of colleges.

Interviews and discussions have also been carried out:

- within study programmes of medical colleges;
- at teachers' pedagogical development program of vocational education;
- at a professional development seminar for comprehensive schools of *Dobele* Area.

The authors` experience in development, assessment and implementation of study programs has been evaluated.

#### **Results and discussion**

An aspiration towards education for sustainable development on a mega-level or global scale has been made within the framework of UNESCO's Decade (2005 to 2014). The most important cornerstones of this aspiration are five pillars of education: learning to know, learning to be, learning to live together, learning to do and learning to transform oneself and society. At the same time the European Qualifications Framework (EQF) has been established at the macro or European level, which defines knowledge, skills and competences. Currently the National Qualifications Framework (NQF) and also the Latvian Qualifications Framework (LQF) are being developed on the basis of the EQF. The LQF, like the EQF learning defines such outcomes as knowledge, skills and competences. The importance of learning outcomes has also been emphasized in the ongoing evaluation of the Latvian study programmes. To assess the compliance of the EQF and the LQF with the aspiration towards ESD we have included some fragments from description of knowledge, skills and competences.

Recommendations of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning contain the following definitions:

- 'learning outcomes' means statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence;
- 'knowledge' means the outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study. In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual;
- 'skills' means the ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the European Qualifications Framework, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments);
- 'competence' means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy.

Knowledge, skills and competence descriptors for each EQF and LQF level (there are eight levels together) have been described and compared in the Self-Assessment Report (Referencing of the Latvian Education System to the European Qualifications Framework..., 2011, 71-75), which have been prepared by the Academic Information Centre in cooperation with the Lifelong Learning Development Division of the Policy Coordination Department of the Ministry of Education and Science of the Republic of Latvia. Comparing the EQF and the LQF descriptors of knowledge, skills and competence we can state that the LQF provides more detailed description of knowledge, skills and competences. For example, the EQF Level 4 describes knowledge as *factual and theoretical knowledge in broad context within a field of work or study*, but the LQF has the following description of knowledge of this level (Referencing of the Latvian Education System to the European Qualifications Framework..., 2011, 72-73):

- Able to demonstrate comprehensive knowledge of facts, theories and causalities, which are needed for personal growth and development, civic participation, social integration and continuous education. Able to comprehend in detail and demonstrate knowledge of diverse facts, principles, processes and concepts in a specific field of studies or professional activities in standard and non-standard situation. Able to demonstrate comprehensive knowledge of facts, theories and causalities, which are needed for personal growth and development, civic participation, social integration and continuous education.
- Able to comprehend in detail and demonstrate knowledge of diverse facts, principles, processes and concepts in a specific field of studies or professional activities in standard and non-standard situations.
- Has good knowledge of technologies and methods for performing study or work tasks in the profession.

Similar differences in the descriptor volume can be traced in several descriptions of knowledge, skills and competences for other levels. After their evaluation we can state that knowledge, skills and competence descriptors of the LQF more thoroughly show the connection with five pillars of ESD than the EQF.

Five pillars of ESD in the UNESCO publications have been described as follows:

Learning to know (UNESCO, 2010a) – learn to learn for respecting and searching for knowledge and wisdom:

- learn to learn;
- acquire a taste for learning throughout life;
- develop critical thinking;
- acquire tools for understanding the world;
- understand sustainability concepts and issues.

Education for Sustainable Development:

- recognizes the evolving nature of the concept of sustainability;
- reflects the ever growing needs of societies;
- acknowledges that fulfilling local needs often has international effects and consequences;
- addresses content, context, global issues and local priorities.

Learning to do (UNESCO, 2010b) – knowledge, values and skills for active engagement in productive employment and recreation:

- be an actor as well as a thinker;
- understand and act on global and local sustainable development issues;
- acquire technical and professional training;
- apply learned knowledge in daily life;
- be able to act creatively and responsibly in one's environment.

Education for Sustainable Development:

- is locally relevant and culturally appropriate;
- must become a concrete reality for all our daily decisions and actions;
- is about helping build a sustainable and safe world for everyone.

Learning to live together (UNESCO, 2010c) – knowledge, values and skills for international, intercultural and community cooperation and peace:

- participate and co-operate with others in increasingly pluralistic, multi-cultural societies;
- develop an understanding of other people and their histories, traditions, beliefs, values and cultures;
- tolerate, respect, welcome, embrace and even celebrate difference and diversity in people;
- respond constructively to the cultural diversity and economic disparity found around the world;

• be able to cope with situations of tension, exclusion, conflict, violence and terrorism.

Education for Sustainable Development:

- is interdisciplinary. No one discipline can claim ESD for its own, but all disciplines can contribute to it;
- builds civil capacity for community-based decision-making, social tolerance, environmental stewardship, adaptable workforce and quality of life.

Learning to be (UNESCO, 2010d) – knowledge, values and skills for personal and family well-being:

- see oneself as the main actor in defining positive outcomes for the future;
- encourage discovery and experimentation;
- acquire universally shared values;
- develop one's personality, self-identity, self-knowledge and self-fulfilment;
- be able to act with greater autonomy, judgment and personal responsibility.

Education for Sustainable Development:

- builds on the principles and values that underlie sustainable development;
- deals with the well-being of all three realms of sustainability environment, society, and economy;
- contributes to a person's complete development: mind and body, intelligence, sensitivity, aesthetic appreciation and spirituality.

Learning to transform oneself and society (UNESCO, 2010e) – knowledge, values and skills for transforming attitudes and lifestyles:

- work toward a gender neutral, non-discriminatory society;
- develop the ability and will to integrate sustainable lifestyles for ourselves and others;
- promote behaviours and practices that minimise our ecological footprint on the world around us;
- be respectful of the Earth and life in all its diversity;
- act to achieve social solidarity;
- promote democracy in a society where peace prevails.

Education for Sustainable Development:

- integrates the values inherent in sustainable development into all aspects of learning;
- encourages changes in behaviour to create a more viable and fairer society for everyone;
- teaches people to reflect critically on their own communities;
- empowers people to assume responsibility for creating and enjoying a sustainable future.

As it can be seen the descriptions of all pillars especially emphasize sustainable development.

Self-Assessment Report (Referencing of the Latvian Education System to the European Qualifications Framework..., 2011), which was prepared by the Academic Information Centre in cooperation with the Lifelong Learning Development Division of the Policy Coordination Department of the Ministry of Education and Science of the Republic of Latvia does not contain a complex term *Education for Sustainable Development*. The complex term *sustainable development* has been mentioned in Self-Assessment Report annexes for three times only. The term *sustainable* has been mentioned twice, but the term *sustainability* cannot be found at all. From the point of view of sustainable development *learning to learn* is significant, but also this complex term has not been mentioned in the document.

Four pillars of ESD include the description of knowledge, values and skills. The EQF and LQF descriptors based on learning outcomes do not have the term *values*.

The above data have been obtained by carrying out a formal comparative text analysis. By performing a more profound content analysis of the texts being compared it can be stated that knowledge, skills and competences in the EQF and the LQF descriptors of Levels 1- 3 do not directly

involve learning to learn, learning to live together, knowledge, values and skills for personal and family well-being, knowledge, values and skills for transforming attitudes and lifestyles. The same connection does not exist with the descriptors of knowledge, skills and competence of the EQF Level 4.

The LQF envisages the receipt of a certificate of general basic education or certificate of vocational basic education at Level 3, a certificate of general secondary education or certificate of vocational education or diploma of vocational secondary education at Level 4.

After acquiring education in Level 3 or 4 of the LQF, part of the Latvian people do not continue formal education. Therefore it is important to acquire knowledge, skills and competences required for lifelong learning both in informal and non-formal education already in these education levels. To ensure that every person has a sustainable and qualitative life in the modern future society of the 21st century, educational process and outcomes of all levels and types should be based on five pillars of the ESD. So the expansion of the LQF descriptors of knowledge, skills and competences shall be positively assessed when compared to the EQF. The LQF descriptors indirectly and partly include knowledge, values and skills described in the five pillars of education. For example, in Level 4 of the LQF skills and competence are described as follows:

- *Skills:* Able to plan and organize work, using various methods, technologies (including information and communication technologies), equipment, tools and materials for performing tasks. Able to **find, assess and creatively use information for performing study** or professional work tasks and problem solving. Able to **communicate at least in two languages** both in writing and orally in a known and unknown context. Able to work independently in the profession, **to learn and to improve professional qualifications**. Able **to cooperate**.
- *Competence:* Is motivated for **further career development, continuous education, life-long learning** in a knowledge-oriented democratic, **multilingual and multicultural society** in Europe and in the world. Able to plan and perform study or work tasks in the profession individually, **in a team** or by managing the teamwork. Able to assume **responsibility** for the quality and quantity of the outcomes of study or professional activities.

As it can be seen, the description includes the concepts (bold emphasis added by the authors), which are related not only to the pillar of ESD *learning to do*, but also with the other four pillars. The EQF and the LQF provide that the levels of higher qualification also include knowledge, skills and competences from the previous lower levels.

In several studies the implementation of ESD has been evaluated in the context of transformative and transmissive education. It has been stated that ESD is based on transformative education (Sterling, 2001, 2005, Education for Change...), but the current educational practice still finds transmissive education important (Education Approaches, 2004). In our previous studies carried out in some study programmes, it has been established that transition from transmissive to transformative education is taking place (Pēks, 2006). In the further studies it is stated that this transition is relatively slow.

Transformative education (learner constructing and owning meaning) is a process oriented (Sterling, 2001, 2005) and is based on constructivism. Motivation and learning come automatically when one is involved in a process, although a teacher naturally has to find suitable methods and set clear goals for a meaningful and challenging learning (Education for Change...).

Transmissive education (transfer of information to learner) is a product oriented (Sterling, 2001, 2005). Current educational practices: predominantly focus on the ability and need for students to gain skills and knowledge; content is discipline focused and about a 'top-down' transmission of facts and messages; focus on rigid, pre-defined learning outcomes that allow little room for manoeuvre for both teaching staff and students alike (Education Approaches, 2004). The concept of responsive, dynamic and process learning to enable a 'real' understanding of sustainable development poses a conflict with the established, pre-defined learning outcomes currently used to measure student performance (Sterling, 2001; Education Approaches, 2004).

Comparing the five pillars of ESD and the EQF or the LQF knowledge, skills and competence descriptors, the differences in their impact on educational programmes and development of their implementation can be established. The pillars of ESD are more process-oriented, but the EQF and the

LQF descriptors are product-oriented education, where the description and achievement of learning outcomes dominate. In practice an employer's current needs are often emphasized rather than an employee's development opportunities, which are necessary for the adaptation to rapidly changing work and living environment.

Clarification of the formulation of learning outcomes in educational and study programmes in Latvia currently has become particularly topical due to the development of the LQF and evaluation of the study programmes in education (European Social Fund's Project on Evaluation of Higher Education Programmes and Suggestions for Quality Improvement). A questionnaire for the evaluation of higher education study programmes (QUESTIONNAIRE..., 2011) has four evaluation criteria groups: *quality, resources, cooperation, overlapping*. The evaluation criteria do not include direct references to the five pillars of Education for Sustainable Development. The criteria group *sustainability* is oriented mainly to the sustainability of the programme undergoing evaluation.

The authors of the article (Bērtaitis, Pēks) directly participated in the evaluation process; they made self-assessment reports of the educational programmes undergoing evaluation and coordinated the development of the study course programmes included in them. Besides discussions and academic staff interviews took place. The authors have participated in the seminars held within the framework of the European Social Fund's Project on Evaluation of Higher Education Programmes and Suggestions for Quality Improvement for several times, as well as in the seminars on establishment of the LQF in the Latvian Academic Information Centre National Coordination Point. Teachers working in comprehensive schools, students from teachers` professional development programmes, nurses and work safety specialists have been interviewed. The duties of the above mentioned specialists include also the implementation of teaching learning process.

Having summarized the observations obtained through the interviews and discussions it has been determined that in the development of education and study course programmes the main emphasis is put on formulation of learning outcomes in accordance with the requirements set forth in the LQF. Due to a lasting impact of the previous experience the formulations mainly characterize the content of the teaching learning process rather than the learning outcomes – knowledge, skills and competences. Only some part of the teachers (about a half) is aware of five pillars of Education for Sustainable Development. Despite the fact that globally-oriented information dominates in the descriptions of pillars, the interviewed teachers recognized the importance of the pillars in the implementation of small-scale specific educational programmes. The fifth pillar – learning to transform oneself and society – is particularly important for the inhabitants of Latvia, which in addition to the four pillars formulated at the end of the 20<sup>th</sup> century (UNESCO, 1996) was included in UNESCO's educational strategy in the 21<sup>st</sup> century. However, methods used for acquiring and assessing the knowledge, value and skills for transforming attitudes and life styles are problematic. The opinion dominates that learning to transform oneself and society can be mainly acquired in non-formal education.

If the focus to improve educational programmes is on learning outcomes, then the maintenance of product-oriented transmissive education is facilitated rather than aspiration towards a transformative process-oriented education, which is necessary to get the ESD.

UNESCO (2011) provides essential characteristics of ESD. Education for sustainable development:

- is based on the principles and values that underlie sustainable development;
- deals with the well-being of all four dimensions of sustainability environment, society, culture and economy;
- uses a variety of pedagogical techniques that promote participatory learning and higher-order thinking skills;
- promotes lifelong learning;
- is locally relevant and culturally appropriate;
- is based on local needs, perceptions and conditions, but acknowledges that fulfilling local needs often has international effects and consequences;
- engages formal, non-formal and informal education;
- accommodates the evolving nature of the concept of sustainability;

- addresses content, taking into account context, global issues and local priorities;
- builds civil capacity for community-based decision-making, social tolerance, environmental stewardship, an adaptable workforce, and a good quality of life;
- is interdisciplinary.

No single discipline can claim ESD for itself; all disciplines can contribute to ESD (UNESCO, 2011).

The use of complementary ESD characteristics, five pillars of ESD and the LQF descriptors in the development, implementation and evaluation of educational programmes will facilitate the relevant education process and results in the  $21^{st}$  century.

#### Conclusions

- In the 21<sup>st</sup> century there is an aspiration towards education for sustainable development on the global scale whose important cornerstones are the five pillars of ESD.
- Development and implementation of Latvian Qualifications Framework relevant to European Qualifications Framework as well as the evaluation of higher education programmes has activated the perfection of these programmes. Significant cornerstones of the perfection are learning outcomes of the EQF and the LQF, which are defined in terms of knowledge, skills and competences.
- The EQF and the LQF descriptors of learning outcomes of knowledge, skills and competence are only slightly connected with the description of ESD five pillars. A more detailed description of this connection is given in the LQF than the EQF.
- The teachers' previous experience regarding transmissive education, imperfect knowledge of the five pillars of ESD, as well as emphasis put on the learning outcomes promote the retention of the product oriented transmissive education that partially comply with acquiring ESD.
- To implement ESD which would comply with the 21<sup>st</sup> century, it is recommended to use complementary ESD characteristics, five pillars of ESD and LQF descriptors in the development, implementation and evaluation of educational programmes.

#### References

- Briede B., Pēks L. (2011). *Ekoloģiskā pieeja izglītībā* (Ecological Approach in Education). Monogrāfisko pētījumu sērija *Izglītības ekoloģija*. Latvijas Lauksaimniecības universitāte, Jelgava, 160 lpp. CD-ROM. (In Latvian)
- 2. Bronfenbrenner U. (1977). Toward an experimental ecology of human development. *Amer. Psychol.*, 1977, v. 32, pp. 513-531.
- Bronfenbrenner U. (2005). The Bioecological Theory of Human Development. In U. Bronfenbrenner (Ed.), *Making Human Beings Human: Bioecological Perspectives on Human Development*. Sage Publications, Thousand Oaks, CA, pp. 3-15.
- 4. *Education Approaches*. (2004). Loughborough University. [online] [07.11.2011]. Available at <u>http://www.lboro.ac.uk/research/susdesign/LTSN/approaches/approaches-main.htm</u>
- 5. Education for Change: a Handbook for Teaching and Learning Sustainable Development. Baltic University Programme Uppsala University, 74 p. [online] [07.11.2011]. Available at <u>http://www.balticuniv.uu.se/index.php/downloadable-files/doc\_download/179-education-for-change-handbook-english</u>
- 6. Pēks L. (2006). Changes to Transformative Education and Ecological Models of Management of Education. *Journal of Science Education*, Vol. 7, 2006, Special Issue, pp. 50-52.
- 7. *QUESTIONNAIRE for Evaluation of Higher Education Study Programmes*. (2011). [online] [07.11.2011]. Available at <u>http://www.aip.lv/ESF\_studiju\_prog\_novert\_anketa\_en.htm</u>
- Recommendation of the European Parliament and of the Council of 23 April 2008 on the Establishment of the European Qualifications Framework for Lifelong Learning. (2008). [online] [15.03.2011]. Available at: <u>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:111:0001:0007:EN:PDF</u>

- Referencing of the Latvian Education System to the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area. Self-Assessment Report. (2011). Academic Information Centre, Rīga, Latvia, 137 p. [online] [20.11.2011]. Available at <u>http://www.nki-latvija.lv/wp-content/uploads/2011/09/Latvian-Self-Assessment-Report-2nd-version.pdf</u>
- 10. Sterling S. (2001). *Sustainable Education Re-visioning learning and change*. Schumacher Briefing no. 6. Schumacher Society/Green Books, Dartington, 96 p.
- 11. Sterling S. (2005). *Whole Systems Thinking as a Basis for Paradigm Change in Education: Explorations in the Context of Sustainability*. PhD thesis. Centre for Research in Education and the Environment, University of Bath, Bath. [online] [07.11.2011]. Available at http://www.bath.ac.uk/cree/sterling/sterlingtitle.pdf
- 12. UNESCO. (1996). *Learning the Treasure Within*. Report to UNESCO of the International Commission on Education for the Twenty-first Century. [online] [07.11.2011]. Available at <a href="http://unesdoc.unesco.org/images/0010/001095/109590eo.pdf">http://unesdoc.unesco.org/images/0010/001095/109590eo.pdf</a>
- 13. UNESCO. (2010a). *Education. Learning to know*. [online] [07.11.2011]. Available at <u>http://www.unesco.org/en/education-for-sustainable-development/strategy/learning-to-know/#c16163</u>
- 14. UNESCO. (2010b). *Education. Learning to do*. [online] [07.11.2011]. Available at <u>http://www.unesco.org/en/education-for-sustainable-development/strategy/learning-to-do/#c16151</u>
- 15. UNESCO. (2010c). *Education. Learning to live together*. [online] [07.11.2011]. Available at <a href="http://www.unesco.org/en/education-for-sustainable-development/strategy/learning-to-live-together/#c16155">http://www.unesco.org/en/education-for-sustainable-development/strategy/learning-to-live-together/#c16155</a>
- 16. UNESCO. (2010d). *Education. Learning to be*. [online] [07.11.2011]. Available at <a href="http://www.unesco.org/en/education-for-sustainable-development/strategy/learning-to-be/#c16159">http://www.unesco.org/en/education-for-sustainable-development/strategy/learning-to-be/#c16159</a>
- 17. UNESCO. (2010e). Education. Learning to transform oneself and society. [online] [07.11.2011]. Available at <u>http://www.unesco.org/en/education-for-sustainable-development/strategy/learning-to-transform/#c16148</u>
- 18. UNESCO. (2011). *Characteristics of ESD*. [online] [07.11.2011]. Available at <a href="http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/education-for-sustainable-development/characteristics-of-esd/">http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/characteristics-of-esd/</a>

#### CREATIVITY AS PEDAGOGICAL PROBLEM: STUDENT TEACHERS' VIEW

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**Abstract:** In the framework of the article the interrelations between creativity and actual educational principles are analyzed. The empiric study – factor analysis of student teachers' survey – investigates pre-service teachers' concepts and believes about good pedagogical practice from the point of view of promotion of students' creativity in classroom. The results of the research revealed essential contradictions between the creativity as significant goal of 21st century education and student teachers' understanding of teacher's responsibility and professional possibilities to promote it. In conclusions, the current problems and challenges for teacher educators are substantiated, and recommendations for the development of teacher education curriculum about the strengthening student teachers' readiness to foster their students' creativity, are suggested.

Keywords: creativity in classroom, teacher education, teacher's professional believes.

#### Introduction

Student's creativity is an essential goal of current education in the context of sustainable development of society and ecology of education (EK, 2010, 4.2.). Adaptation to changes, the introduction of innovative products, harmonic personal development and joyful process are there looked as positive aspects of creativity. But the more specific characteristics describes another criteria of creativity - intuitive decisions, sensitivity, tolerance to contradictions, risk taking, loosing the control, refusing from purposefulness etc. These qualities frequently are opposite to classic concept of school education as science-based, well controlled, stabile and safe process. Accordingly, the teachers and politicians of education frequently feel resistance to the purposeful fostering the creativity in pedagogical process.

Searching for the way, how to develop student teachers ability to foster student's creativity in professional studies, the questions arise: 1) how do student teachers understand the significance of promotion their students' creativity; 2) which pedagogical phenomena are related to the creativity the most directly; and 3) which topics about the creativity are essential to discuss in teacher education.

*The aim* of the article is to analyze the concept of creativity in comparison with actual educational principles and to detect the teacher educators' problems and challenges, from this perspective.

In empiric study, using factor analysis of the survey, student teachers' concepts about good pedagogic practice are compared with characteristic of creative classroom.

#### Materials and methods

Creativity is a quality of process, personality and/ or product, which is characterized by novelty (rarity in individual or social context) and usefulness (individual or social significance) (Mumford, 2003).

In the framework of an article, the process and personality aspects of creativity are discussed.

A *creative process* is described as an interplay of conscious and unconscious powers of the psyche: person's imagination, under impression of leading emotions, makes the new combinations of the material of person's experience (Выготский, 1991), divergent thinking generates many various solutions (Cropley, 1999), lateral thinking draws together incompatible components and distinct associations (Де Боно, 1997). The creative process is characterized by refusal of the dominance of abstract, symbolic thinking in favor of the involvement of all psychical powers of a person – attention, perception, memory, imagination, associations, intuition etc. In the creative process a person abandons himself in a "flow", forgetting his "ego" through melting in an object of his action and loosening the difference between work and play (Csikszentmihalyi, 2002). During different stages of a creative process, person experiences excitement and peacefulness, exhalation and sense of full, joyful feeling of an action – reliance, relaxation, concentration, keenness and vigilance at the same time. A result of

a creative process is the emergence of a new image or idea without efforts, by itself. Newborn idea induces unexpected and surprisingly elation. Intuitively it is clear, that the new solution is right, nevertheless it is contradictious to previous concepts, complicate, tense and uncertain control (Edwards, 1999).

Strong ego, willingness to control, a demand for logic substantiation, purposefulness or usefulness, critical and self-critical attitude can block person's involvement into creative process. Creative idea cannot emerge with direct effort, concernment, strong will or purpose (Edwards, 1999). In distinct stage of a creative process person should withdraw from conscious control and trust to unknown. Druzinin concluded that creative idea is as by-product of action with other purpose. The perception, comprehending and acceptance of the new-born idea are not possible without person's sensitivity and attention towards it (Дружинин, 2000).

Characteristic of a *creative personality* is related to person's attitudes and personal qualities – autonomy, courage, spontaneity, openness to new experience and attraction to the complexity. Psychologists describe the experiences of a creative personality in the creative process rather detailed. In the stage of accumulation of information he is lead by the interest and curiosity (Выготский, 1991; Runco, 1999). The " flow" possesses a feeling, that the task is by person's power, that's why he feels self-confident, capable, forceful, efficacious and competent (Chikszentmihalyi, 2002; Bandura, 1997). In the stage of verifying, a person experiences the influence and control over his action, but, when the idea is realized, - satisfaction and pride (Runco, 1999). Person's self-expression is obstructed, when social concepts, manifesting itself in criticism and self-criticism, dominate over the personal believes about self-acceptance and self-expansion; Druzinin called it: "grow within the culture" (Маслоу, 2003; Дружинин, 2000).

The conclusion can be drawn, that promoting the creativity in classroom is related to the students' involvement in the creative process and to strengthening their qualities of creative personality. Students' involvement into the creative process can be stimulate with the selection of interesting exciting, meaningful content of learning and activities, which occupies their creative capacities. Diverse creativity techniques, which focus on a variety of aspects of creativity – idea generation, divergent thinking, associations, metamorphoses, improvisation, spontaneous expression, re-framing problems etc. are there available (Де Боно, 1997; Edwards, 1999; Kagaine, 2006). Majority of them elaborates methods, how to avoid social stereotypes by connecting unconscious powers of the psyche. All of them have the dominant orientation to the fluent, play-like process, individual interests and experiences, variability of their individual sets of creative abilities and potential diversity and strangeness of the results of creative activities. Chikszentmihalyi believes that the most significant factor there are the cultivation of students' passionate interest in their subjects and together with it – the reading of the shifting needs of learners.

Student's independence and feeling of self-efficacy, what are necessary for the development of a creative personality, can be reached in pedagogical process by providing the students' initiative and freedom of process-control, balance between challenge and skills, sensitivity and reduced criticism towards the unusual, contradictious individual features of creative process and products. Significant pedagogical principles in this context are focusing on the inherent satisfaction of learning, the minimization the impact of rules, exams and procedures and working on students strengths rather that their weaknesses (Csikszentmihalyi, 2002).

In Table 1, the characteristic of the creativity is interpreted in relation to the principles of transmissive (traditional) and transformative (actual) pedagogical paradigms (Doll,1993; Jonassen, 1999; Fenwick, 2003; Tiļļa, 2005; Helds, 2006).

The comparison shows that pedagogical principles of promoting students' creativity – diversity of content and forms of pedagogical action, acceptance and development of an individuality, readiness for the challenge and personal responsibility (as the other half of freedom) - have strong parallels with the priorities of 21th century education – multiculturalism, problem-oriented and self-directed learning, development of person's individual potential and responsibility. Teachers' understanding about the significance of the creativity in a classroom can be derived from their conceptions about good pedagogical practice.

Table 1

Component of pedagogical	Traditional principles of educationActual principles of education				
action	cuucation				
Content	Reduced, theoretical, abstract, rational, structurally closed, general knowledge	Multidimensional, contradictious, open, personally significant knowledge.			
Learning	Extrinsic motivation Memorisation, transmission and reproduction the knowledge. Discipline, diligence, procedure.	Intrinsic motivation Knowledge construction. Problem-solving. Individual learning strategies.			
Pedagogical cooperation	Discipline, obedience, teacher's initiative an control Compliance with social and political norms	Student's initiative, self-control, self- evaluation. Communication and critical analysis of different values			
Outcomes of learning	United criteria of performance	Development of an individual potential – variable and diverse performance.			

Comparison of traditional and actual educational principles

The *aim of the empiric research* was to analyze the relations of student teachers' concepts about good professional practice with pedagogical principles of promotion of students' creativity. Empirical data for the research was collected by questionnaire. Students were asked to evaluate personal significance of 28 different statements about contradictory pedagogical phenomena (stabile/ mutable content of learning, instructional/ constructive process of learning and individual/ societal oriented pedagogical relationship) in Likert scale (from strongly disagree to strongly agree). For processing and analysis of quantitative data the factor analysis, test of Cronbach Alpha, measurement of the means and frequencies (SPSS 17) were implemented. The selection of the research (251 respondents) was formed by random principle. It includes full and part time students of different teacher education programs from three Latvian universities. Respondents differ by their age, work experience and quantity and quality of their artistic and professional education.

#### Results and discussion

Data reduction with factor analysis (General components and Varimax rotation) figured out 6 factors of the professional believes of teacher with high enough Cronbach Alpha's coefficients. These factors were interpreted in accordance with a manifestation of creativity in a pedagogical process (Table 2).

Factor 1 ( $\alpha = 0.833$ ) unites the variables, which contains the expressions about reproduction of well-known stereotypical solutions, discipline, regulations and teacher's direct intervention in students' learning – teacher's initiative, teaching, control and assessment. Students' responsibility there is to react to outer demands – standard, advices, teaching, particular social role. This factor can be interpreted as strictly contradictious to the creativity as *orientation to norms and control*.

The variables of factor 2 ( $\alpha = 0,808$ ) are united by expressions about teacher's focus on the satisfaction of their students' needs. By this characteristic, teacher is sensitive and eager in student's self-confidence and enthusiasm; he is ready to promote one of conditions of student's creativity. Factor 2 does not contain ideas of normative pedagogy. But positive statements about significance of knowledge construction, student's autonomy or open content of learning, are there absent, as well. Factor 2 was classified as *orientation to student's interest and relaxation*.

Factor 3 ( $\alpha = 0,691$ ) contains variables with expressions about the manifestation of a creative personality - students' feeling of freedom (as realization ones personal preferences and values, independent choice, personally significant decisions) and involvement of interplay of individual capacities. Teacher, who rates these categories highly, can be interpreted as orientated *to the individual self-expression* and interested in promoting diversity and variability of the content and process of learning.

Factor 4 ( $\alpha = 0,784$ ) relates to the teacher's purposefulness freedom, taking ones responsibility and readiness to learn (to change oneself) – qualities of teacher as a creative personality, but it does not witness directly about teacher's interest in the development of his student's creativity. Factor 4 can be defined as *orientation to teacher's independence and self-development*.

Table 2

Nr	Variables	Loadings	Interpretation
1.	1. Teacher's job is to control, to inspect	0,774	Orientation to
	2. Teacher's job is to maintain the order, regulations and discipline	0,726	norms and control
	3. Teacher's job is to speak, to assure	0,632	
	4. Teacher's job is to teach, to explain, to advice	0,565	
	5. It is significant: the acquisition of particular knowledge and skills in accordance with standard	0,538	
	6. It is significant: the competition, intensity and efficacy	0,499	
	7. It is significant: the agreement, performance of particular social role	0,482	
2.	8. Teacher's job is to encourage, to unleash, to support	0,786	Orientation to
	9. Teacher's job is to understand, to trust, to respect	0,754	student's interest
	10. Teacher's job is to fascinate, to suggest, to cause an interest	0,702	and relaxation
	11. Teacher's job is to observe, to see, to hear out	0,657	
3.	12. It is significant: students' choice an critical evaluation	0,729	Orientation to the
	13. It is significant: the cultivating of individual, social and	0,688	individual self-
	cultural differences. 14. It is significant: stabile general knowledge	0,614	expression
	15. It is significant: to reveal and develop student's	,	
	individual interests and capacities.	0,475	
4.	16. Teacher's job is to reach, to achieve	0,707	Orientation to
	17. Teacher's job is to learn, to cognize, to investigate	0,672	teacher's
	18. Teacher's job is to perform, to try	0,661	independence and
	19. Teacher's job is to choose, to make the decisions, to take ones responsibility	0,466	self-development
5.	20. It is significant: emotionality and joy	0,662	Orientation to
	21. It is significant: to feel free and self-confident	0,543	supportive, non-
	22. It is significant: the politeness, tolerance, moral norms	0,519	conflicting social
	23. It is significant: rights, justice, equal requirements to all	0,501	0 0
	24. It is significant: student's self-assessment	0,463	environment
6.	25. Teacher's job is to create conditions, to allow, not to disturb	0,610	Orientation to
		0 5 9 7	challenge and
	26. It is significant: the adventures, contradictions, surprise 27. It is significant: plainness, comprehensibility,	0,587 -0,432	tolerance towards unexpected
	correctness of knowledge		· <b>r</b>

#### Factors of promoting the creativity in the pedagogical process

Variables of factor 5 ( $\alpha = 0,639$ ) are contradictious at the first look. "Emotionality and joy" and "feeling free" fits with a flow of a creative process, but politeness, self-control and equal rights relates more to the socio-cultural norms, which exclude the creative insight and original idea (Дружинин, 2000). It can be interpreted, that, by student teachers' opinion, joy and feeling free are not related with joy of an action, what was suggested by theory of creativity. So, the high rating of these variables does not witness about student teachers' interest in a creativity, but rather about *orientation to supportive*, *non-conflicting social environment*, where everybody takes care about others' feeling free and selfconfidence, but not about self-enhancement, self-efficacy, independence - qualities of a creative personality.

Variables of a factor 6, includes the expressions about the adventures, surprises and discrepancy in pedagogical phenomena. Highly pronounced, factor 6 indices teacher's appreciation of complexity and the unknown. The declining of correctness and comprehensibility as the most important educational criteria is favorable for the teacher's reliance to students' diverse, original and strange ideas. Readiness to allow the children freedom to act in accordance with their wishes and interests, without teacher's direct intervention specifies the trustfulness to students' independent choices. Factor 6 was defined as *orientation to challenge, tolerance towards unexpected*. From the point of view of creative personality, this factor covers the challenge, risk-taking and openness of mind (Huber, Roth, 2003), but from perspective of the creative process - fluency, sensitivity, diversity, discovery.

These 6 factors cover the personal and process aspects of the creativity in the pedagogical process. As the best combination for promoting students' creativity in the classroom the high evaluation of factors 2, 3 and 6 can be substantiated – unity of interest and relaxation, individual self expression and challenge.

Student teachers range the significance of these factors differently. In figure 1, the mean statistic values of variables of each factor are represented ("5" strong agreement with a significance of particular pedagogical phenomena, "3" declares it as non-significant, but "1" – as destructive). The statistic mean of factor 6 is figured out, taking into consideration the reversed value of 3rd variable and its weight inside a factor.

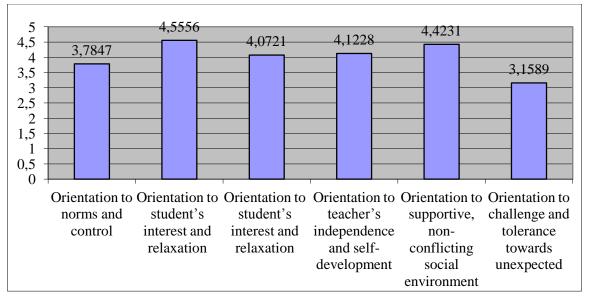


Figure 1. Student teachers' orientation to promoting students' creativity

The analysis of the current situation shows, that student teachers evaluate the most highly students' interest, emotional wellbeing, stability, safety and maintenance of politeness and respect (factors 2 and 5, means - 4,6 and 4,4). It fits with investigation of Patrick and Pintrich, that the primary pedagogical goal of student teachers is good relationship with children and their wellbeing (Patrick, Pintrich, 2001). Such attitude, from one hand, facilitates creativity, because of dominance of vital, lively process over a striving for perfect result - children can feel free to realize their self-expression, to experiment, to play. From other hand, teacher's orientation primarily on socially favorable, stereotypical solutions can be hazardous for students' insouciant creative process and for supportive evaluation of its unpredictable, unexpected, discussable result. An endeavor to be "a good boy" can prohibit express the personal preferences and opinion freely.

The results of the questionnaire do not state a considerable orientation to teacher's dominance in pedagogical action - orientation to norms and control (the value of factor 1 is the second lowest one: 3.78). It means, that about 1/3 of student teachers are ready to differentiate the content of learning, to regard students' interest higher as acquisition particular knowledge and to diminish the strong

criticism. However, the high rating of the variable "teaching, advising and explaining as teacher's job" (Appendix 1) suggests, that teacher's readiness to refuse the dominant role of teacher in pedagogical process seems to be discussable.

The negative tendency for promoting students' creativity is the lowest ratings of challenge and diversity in pedagogical process (Fact.3, 3.1589). Only 13% of respondents agree that adventures, surprises and contradictions are significant characteristic of pedagogical process (m=3.217). Majority of respondents are oriented towards correctness, plainness and comprehensibility (m=4.4816), what can be interpreted as suspicion to different and unaccountable manifestations and ideas of students, negative attitude to complexity, novelty and problem-solving, anxiety about reducing the control and risk-taking. Student teachers mostly see the contradictions, problems and conflicts as obstacles, neither as an opportunity for learning, personal development and creativity.

Ratings of teacher's independence and self-development, shows rather optimistic view on student teachers' readiness to be creative – to develop, to learn and change oneself (fact.4.; 4,1228).

The analysis of the combination of variables inside 3 and 5 factors revealed some other problems in student teacher's attitudes towards students' creativity:

Inside the factor 3, it is obvious, that student teachers rate the revealing students' individual interests and capacities much more higher (4,58) than the personally significance of the content of learning and student' critical attitude (3,84). Consequently, student teachers relate children choice with their "stabile general knowledge", not with a freedom of the personality. It witnesses, that teachers' readiness to support their students' creative personalities - independent decisions and responsibilities is disputable. They agree, that students' individualities are important, but do not involve students themselves in reasoning about it.

Emotionality, joy, feeling of freedom and self-confidence (fact.5) are perceived by respondents in connection with social relationship, politeness and justice, not with the students' individual processes - creative self-expression or learning. In accordance with Druzinin etc, orientation to social stereotypes, i.e, equal rights, moral norms or ideals of beauty, prohibits the spontaneity of creative process.

Such a result shows the contradictions between students' creativity as educational goal, actual principles of education (orientation to multiculturalism, openness, innovations and development of individual potential of each child) and student teachers' readiness to implement them into pedagogical practice.

#### Conclusions

Creativity as educational goal fits with openness to innovations, diversity, complexity and mutuality, development of individual potential, problem-oriented and self-directed learning. The acquisition of plain and correct knowledge, control, stability, dominant orientation towards social norms and moral regulations are contradictious to creativity.

Recommendable for fostering students' creativity in a classroom is a balance between challenge and safety. In pedagogical process, challenge is connected with diversity, complexity of the content of learning, problem-solving, risk taking, enthusiasm and responsibility about ones choice. Safety relates to supporting, non-critical and gentle relationship, relaxation, play, feeling freedom, joy and reducing the demands.

In current situation there is no problem with student teachers' readiness to refuse implementation of strict norms and regulations, but they are not ready to delegate the initiative and responsibility to their students, as well. Student teachers are eager to satisfy children needs in safety, support and interesting activities, but they are reserved to incorporation children personally significant and variable personal life-experiences in the content of learning.

From the perspective of the promoting students' creativity, the main problem is student teachers' conceptions about good professional practice as a strong dominance of the relaxation and social stereotypes over the challenge, complexity, adventures and discoveries.

If the educational aim is promoting the students' creativity, teachers and teacher trainers must be aware of these contradictions. There cannot be the precise instruction – what is the best proportion of rousing the creativity in a classroom and learning the socially acceptable solutions, but the general

recommendations for teacher educators is to take the responsibility about student teachers learning: 1) to be sensitive towards diversity; 2) to differentiate, appreciate and evaluate it; 3) to stimulate and support students' personally significant choice and to trust their independent decisions; 4) not to be afraid of conflicts, ambiguities and contradictions.

#### References

- 1. Bandura A. (1997). *Self-efficacy: the exercise of control.* W.H. Freeman, New York, 604 p.
- 2. Cropley J.A (1999). Creativity and Cognition: Producing Effective Novelty. *Roeper Review*, Vol. 21, Taylor & Francis group, pp. 253-260
- 3. Csikszentmihalyi M. (2002), *Flow: The Classic Work on How to Achieve Happiness*, Rider, London, 314 p.
- 4. Doll Jr.W.E. (1993). *A Post-Modern Perspective on Curriculum*. Teachers College Press, New York, pp. 223 232.
- 5. Edwards B. (1999). *Drawing on the right side of the brain*. Penguin Putnam Inc. New York, 291 p.
- Eiropas Kopienu komisija (2010). Mūžizglītība zināšanām, jaunradei un jauninājumiem (Lifelong learning for knowledge, creativity and inovations), C 117 E/26 Eiropas Savienības Oficiālais Vēstnesis 6.5. (In Latvian)
- 7. Fenwick T.J. (2003). *Learning Through Experience: Troubling Orthodoxies and Intersecting Questions.* Krieger Publishing Company, 213 p.
- Helds J. (2006). Mācīšanās kā konstruktīvs un sistēmisks jēdziens (Learning as constructive and systemic concept). *No zināšanām uz kompetentu darbību*. LU akadēmiskais apgāds, Rīga, 31 – 35 lpp. (In Latvian)
- 9. Huber G.L., Roth J.W. (1999). *Finden oder suchen?* (To find or to search?) Ingeborg Huber Verlag, Schwangau, 183 p. (in German)
- Jonassen D.H. (1999). Designing constructivist learning environments. *Instructional design theories and models: A new paradigm of instructional theory*, ed. by Reigeluth C.M., Volume II, Lawrence Erlbaum Associates, Mahwah, NJ, pp. 215-239.
- 11. Kagaine Z. (2006). *Radošā domāšana vizuālajā mākslā* (Creative thinking in visual art). Zvaigzne ABC, Rīga, 116 lpp. (In Latvian)
- Mumford M.D. (2003). Where have we been, where are we going? Taking stock in creativity research. *Creativity research journal*, Vol. 15, pp. 107 120. [online] [22.06.2011]. Available at:

http://www.tandfonline.com/doi/abs/10.1080/10400419.2003.9651408

- Patrick H., Pintrich P.R. (2001). Conceptual Change in Teachers' Intuitive Conceptions of Learning, Motivation, and Instruction. *Understanding and Teaching the Intuitive Mind: Student and Teacher Learning*. Ed. By Sternberg R.J., Torff B. Lawrence Erlbaum Associates, Mahwah, NewYork, pp. 117 - 141.
- 14. Runco M. (1999). Tactics and strategies of creativity. *Encyclopedia of creativity*. Vol.2 Academic Press, Sasn-Diego, London, pp. 611 616.
- 15. Tiļļa I. (2005). *Sociālkultūras mācīšanās organizācijas sistēma* (The system of organisation of socio-cultural learning). Raka, Rīga, 295 lpp. (In Latvian)
- 16. Боно Э. Де (1997) *Латеральное мышление* (Lateral Thinking). Питер Санкт-Петербург, 316 с. (In Russian)
- 17. Выготский Л.С. (1991). Воображение и творчество в детском возрасте (Imagination and creativity in childhood) Просвещение. Москва, 90 с. (In Russian)

- 18. Дружинин В.Н. (2000). Психология общих способностей (Psychology of general capacities). Питер, С.Петербург, 356 с. (In Russian)
- 19. Маслоу А. (2003) *Мотивация и личность* (Motivation and personality). Питер, Санкт-Петербург, 351 lpp. (In Russian)

#### Appendix 1

## Student teachers' concepts about significance of particular phenomena of pedagogical process. Statistical analysis

<b>Fact</b> 1.	Variable	Mean	Valuation of a variablie % of the sample*				
			5	4	3	2	1
	Teacher's job is to control, to inspect	3,5351	19	37	32	8	4
	Teacher's job is to maintain the order, regulations and	3,8162	28	43	18	8	3
	discipline						
	Teacher's job is to speak, to assure	3,9852	36	35	23	5	1
	Teacher's job is to teach, to explain, to advice	4,4081	61	24	12	3	0
	It is significant: the acquisition of particular knowledge and skills in accordance with standard	3,5919	22	40	24	10	4
	It is significant: the competition, intensity an efficacy	3,5317	38	46	11	4	1
	It is significant: the agreement, performance of particular social role	3,7320	24	40	23	9	4
2.	Teacher's job is to encourage, to unleash, to support	4,5699	67	22	10	1	0
	Teacher's job is to understand, to trust, to respect	4,5324	67	23	8	1	0
	Teacher's job is to fascinate, to suggest, to cause an interest	4,6667	69	27	3	1	0
	Teacher's job is to observe, to see, to hear out	4,4301	59	29	12	0	0
3	It is significant: students' choice an critical evaluation	3,8456	28	38	25	8	1
	It is significant: cultivating of individual, social and cultural differences	4,0198	67	26	6	1	0
	It is significant: stabile general knowledge of science and art	3,8419	29	39	23	8	1
	It is significant: to reveal and develop student's individual interests and capacities	4,5809	67	26	6	1	0
4	Teacher's job is to reach, to achieve	4,1544	43	36	16	5	0
	Teacher's job is to learn, to cognise, to investigate	4,3667	55	30	11	4	0
	Teacher's job is to perform, to try	3,9148	29	43	20	8	0
	Teacher's job is to choose, to make the decisions, to take ones responsibility	4,0554	36	42	17	4	1
5.	It is significant: emotionality and joy	4,2757	47	38	12	3	0
	Teacher's job is to feel free and self-confident	4,5238	70	21	7	2	0
	It is significant: the politeness, tolerance, moral norms	4,5956	67	26	6	1	0
	It is significant: rights, justice, equal requirements to all	4,2878	54	29	12	4	1
	It is significant: student's self-assessment	4,4325	57	33	10	0	0
6.	Teacher's job is to create conditions, to allow, not to disturb	3,9853	34	39	20	6	1
	It is significant: the adventures, contradictions, surprise	3,2177	13	29	32	17	9
	It is significant: plainness, comprehensibility, correctness of knowledge	4,4816 R1,5158	59	33	7	0	1

\* 5 - strongly agree, 4 - agree, 3 - neither agree nor disagree, 2 - disagree, 1 - strongly disagree.

#### ENVIRONMENT OF DISTANCE LEARNING FOR HUMANIZATION AND DEMOCRATIZATION OF EDUCATION: THE HISTORICAL ASPECT

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Abstract: Nowadays ideas about humanization and democratization of education are becoming more popular. The unreasonable standardization and inflexibility of education, including unsolved problems of individualization of education at schools with large amount of students, the deficit of the humanistic approach, other problems in education emphasize the meaning of the conceptions of an open school, an open humanistic target oriented educational environment, as well as evaluate the experience of distance learning in the world in order to offer the opportunities of distance learning in Latvia both in basic and secondary education, in higher education and adult education, as well as in the urban and rural educational environment. The aim of the article is to publish the results of the theoretical research on the history of distance learning. The authors give theoretical substantiation to the ideas of distance learning, as well as offer an insight into the development of distance learning, where the experience of many countries is summarized. As a result of research, the authors drew several conclusions: 1) the origin of distance learning could be found already in the period of Renaissance; 2) the ideas of the humanization, including individualization, as well as democratization of education, particularly the ideas of accessibility, became the base for the search and implementation of distance education; 3) since the 18<sup>th</sup> century, when the first attempt of distance education had been registered, till nowadays the humankind has amassed rich experience in this sphere; 4) the correspondence education is the initial form of distance learning; 5) the development of distance education in the 20<sup>th</sup> century was facilitated by the development of information and communication technologies and their introduction into education; 6) in connection with the development of distance education, a new direction — *media pedagogy* — began its development in pedagogy.

Keywords: open educational environment, accessibility of education, distance learning/education.

#### Introduction

The education of the 21<sup>st</sup> century is characterized by the keywords humanization of education, openness and accessibility of educational environment, diversity of education, globalization of education, and sustainability of education. The humanization, accessibility, openness and diversity of educational environment are the guarantee of the sustainable development of education.

The ideas of humanization, democratization, including, the ideas of accessibility, could be found already in the works of great thinkers of Renaissance that became the source for the development of the conceptions of extramural education. Distance learning is one of the forms of extramural education.

The most rapid development of distance learning took place in the 20<sup>th</sup> century.

Distance learning has become more topical during the last decade as an alternative to the traditional educational process. Asone of the forms of extramural education, distance learning, first of all, related to the broadening of opportunities offered in connection to home education under home environment and international education or crossborder education.

In the 20<sup>th</sup> century distance learning was mostly spread in higher education, then, thanks to the development of the methodology of distance learning and the introduction of new technologies in education, distance learning became accessible also at the level of secondary and even basic education. Thus the significance of teachers' competencies becomes more important in the field of the methodology of distance learning.

Our experience proves that the audience of distance learning is rather wide: students of school age and grown-up students; the employed and the nonworking population; people who could not fit into the traditional educational system due to different reasons; people who resume their education again by choosing the second chance education to be obtained in a way of distance learning; people with special needs a.o. In order the process of distance learning would be successful, so that it would truly serve the democratization and humanization of education, it is necessary to study the history of the development of distance learning, relating the ideas of distance learning to the ideas of the humanization and democratization of education. **The aim of the article** is to publish the results of theoretical research performed by the authors of the article on the history of distance learning.

## Materials and Methods

In order to perform research, aggregate, analize and evaluate information about the developmental history of distance learning, the authors of the article carried out *research in different directions*.

- 1. The ideas of the humanization and democratization of education in the developmental history of pedagogical ideas, including the origin of the ideas of lifelong education.
- 2. The conceptions of an open school, open education and open, humanistic target oriented educational environment.
- 3. The origin and developmental history of distance learning as a form of extramural education.

## **Research methods:**

- the study, theoretical analysis and evaluation of scientific, methodological literature and different documents;
- reflection of authors' personal experience in the field of distance learning.

## **Results and Discussion**

The origin of distance learning ideas is connected with the ideas of humanization and democratization of education, first of all, with the ideas of accessibility of education for the whole nation, irrespective of people's social status, welfare level, sex and age, level of preliminary knowledge etc.

Such ideas were already expressed by J. A. Comensky, who developed and substantiated an educational conception, where the basic requirement was to teach "*profoundly everything to everyone in all kinds of ways*". It was a brave, even revolutionary idea in a social and political sense: 1) *everyone* meant the poor and the rich, the noble and the needy, the girls and the boys, as gentlemen and the servants, the old and the young; 2) *everything* meant the united concept and totality of views about the world, that expands during the lifespan of a person (as the annual rings of trees) on the basis of cycles; 3) *profoundly* meant braod and systemic knowledge; 4) *in all kinds of ways* meant that J. A. Comensky anticipated the diversity of the acquisition of, its alternative forms that could ensure the accessibility of education. Thus, the basis of J. A. Comensky's educational conception includes the idea of lifelong education that is grounded on the principles of humanization and democratization of education. J. A. Comensky was one of the first who had his own vision of lifelong education that indicated a new direction in the development of pedagogy, namely, the development of evolutionary pedagogy. J. A. Comensky pointed out several stages of lifelong education, substantiation of which is based on the idea of the periodization of age stages and the principle of nature correspondence (Васильева, 2002; Кларин, Джуринский, 1988; Хапаева, 2007).

Humanization and accessibility of lifelong education, as well as the diversity of educational environment became the basic idea for the development of lifelong education concept in the  $20^{\text{th}}$  century.

The revival of the paradigm of lifelong education in the 20<sup>th</sup> century was facilitated by B. A. Yeaxlee who developed and substantiated the term "*life as learning*" within the context of future society's view. B. A. Yeaxlee in his work emphasized also the idea that humanization and democratization of education should be ensured by the diversity of forms for the acquisition of education at any age. Thanks to the cooperation of B. A. Yeaxlee and E. C. Lindeman, who was one of the first to define the basic principles and limits of adult education, the equal value in the lifelong education concept was attributed to both formal education and an individual's gained experience, where the self-education has a significant role (Yeaxlee, 1920).

In the second half of the 20<sup>th</sup> century and at the beginning of the 21<sup>st</sup> century one of the most important doctrines in the educational development are the concepts of *open education, open* 

*educational environment, open school* that in philosophy are defined as *postmodern* age (Collins, Greeno, Resnick, 1996; Koke, 1999; Paul, 1996).

The concept of *open education* that emerged in the second half of the 20<sup>th</sup> century and was developed at the beginning of the 21<sup>st</sup> century is closely related to the conceptions of *lifelong education* and *continuous education* that are interconnected (Colletta, 1996, 22-27; Hasan, 196, 33-41; Sutton, 1996, 27-32).

The ideas of *a school as an open environment* gained a new quality and a new perspective at the end of the 20<sup>th</sup> century, when the influence of the globalization processes on education increased. Alongside with the exchange of experience with the schools of western countries the ideas of *an open school* as an integral part of society emerged in Latvia.

For instance, it follows from the model of *a school as an open system* developed by I. Raituma (Raituma, 2009) that only a school formed by many variable elements — resources, educational services, programs — that are closely related to the elements of both external and internal environments could be considered as an open system.

In her turn, I. Katane (Katane, 2005; Katane, 2007), on the basis of ecological approach in research and education, has developed and scientifically substantiated a model of *a rural school as open, humanistic target oriented educational environment* where the school, in fact, is a multifunctional center of education and culture for the whole rural community.

The other interpretations of the concept of *an open school* in the 20<sup>th</sup> century are related to the introduction of new technologies in the educational environment, when the ideas of distance learning became more and more popular and gained a new perspective, as well as the evaluation and popularization of experience already gained in this sphere became more important.

Distance learning provides a wide range of opportunities to respect the individual approach in education, as well as ensures an individualization of educational content and the educational process itself. Therefore it was important to follow the development of the idea of the individualization of education from in the historical aspect.

Humanization and democratization of education are related not only to the ideas of lifelong education, but also to the respect towards the individual approach and to the principles of *the individualization* of education that actualize the respect towards the uniqueness of the personality of an individual who studies.

The followers of *the individual approach* to upbringing and studies could be found already in the ancient world. For instance, Marcus Fabius Quintilianus (Quintilian) suggested the idea of the individualization of education, giving preference to home education instead of a school. The ideas of the individualization of education became more and more popular during the historical periods of Renaissance and Enlightenment. Those following and advocating the individual approach in education were François Rabelais, Michel de Montaigne, John Locke, Jean-Jacques Rousseau (Васильева, 2002; Константинов, 1952).

The Swiss pedagogue J. H. Pestalozzi (Pestalocijs, 1996) has acknowledged that every child shall be brought up as individuality according to the essence of his/her force and abilities, no child shall be compared with another child, because he/she is unique. Sh. Amonashvili, the scientist of modern times, the representative of humane pedagogy, holds the same point of view (Амонашвили, 2001).

The ideas of individual approach in education emerged in the works of the classics of Latvian educators in the  $20^{\text{th}}$  century. For example, K. Dekens (Dēķens, 1919) emphasized the idea that an educator has to understand and work with *every child* so that studies would develop him/her as a personality without harming his/her health.

But A. Ruditis (Rudītis, 1933), an educator, reminded that a pupil grows and develops within the limits of his/her individuality. The child cannot be limited by any standards that often do not have scientific substantiation. It is the standards that make healthy and mentally developed children who have a peculiar pace of thinking and working to be considered as the children with specific needs.

Individualization is a requirement or a principle to take into account the pecularities of a pupil's learning style, needs and abilities, as well as the level of development, preliminary knowledge and experience, setting the aims and tasks for studies, choosing methods, work organization and methods

and materials within the educational process and within the development of programs according to every pupil's real possibilities (Skujiņa, 2000).

The basic viewpoints concerning the humanization, including individualization, and democratization of education, first of all, ensuring of accessibility, enabled several educators to come up with the ideas of distance education.

The origin of distance education could be found in the year 1728, when teacher Caleb Philip offered an opportunity to acquire knowledge, study materials on a regular basis (once a week) by sending them via mail (Tālmācības vēsture, 2011).

In 1836 London University was established, where the exams could be taken externally. These opportunities were used not only by the students of this university, but also by the students of other universities (Никитин, 2011).

*The conception of correspondence studies* emerged in the 19<sup>th</sup> century and became the historical source of the conception of distance education. This conception of *correspondence education* became popular and was implemented in several countries by means of mail services. Several colleges were established that offered to acquire several university study programs via mail. In the year 1840 the distance education was implemented on the all territory of England. The main merits go to Isaack Pitman: his students translated the fragments of the Bible and sent them via mail for correction. This method was combined with the full-time studies of Scriptures, and later special tasks were also prepared. The new form of studies became the basis and the origin of the establishment of Isaac Pitman's Correspondence College. The traditions of distance education from England spread also in Germany. In 1856 the Frenchman Charles Toussaint and the German Gustav Langenscheidt established a correspondence school in Berlin, where languages could be mastered (Pittman, 1991; Tālmācības vēsture, 2011; XaraeBa, 2007).

The founder of the system of distance education in the USA was Anna Eliot Ticknor who established and was the director of the school of "homeschooling" ("Boston-based Society to Encourage Studies at Home") from 1873 till 1897. The studies were based on the exchange of letters between students and teacher, as well as on the specially designed tests. In 1873 Anna Eliot Ticknor also developed an educational model for women under the title "Ticknor's Society"; the model was based on the idea of the program implemented in Great Britain "The Society for the Assistance for Learning at Home". At that time (1882) such distance education was developed also in Japan (Anna Eliot Ticknor, 2008).

Several authors had the idea of correspondence studies at the same time. One of them was W. R. Harper, who introduced the alternative type of education in the USA in 1890, where the studies were possible by means of written communication via mail services; thus education became more accessible to those who: 1) could not leave their places of residence to go to the city universities to study as full-time students, 2) did not belong to elite. In 1892 William Rainey Harper established the Department of Extramural Studies at Chicago University, USA. The correspondence education as a form of extramural studies gained support, and it was some kind of protest against the undemocratic and inelastic educational system in several European countries and the USA, especially regarding the rural inhabitants. In 1906 the correspondence studies via mail were introduced at the University of Wisconsin (Pittman, 1991; НИКИТИН, 2011; ХАПАЕВА, 2007).

At the beginning of the 20<sup>th</sup> century the elements of distance education regarding the use of mail services were introduced also in Russia: at Nahodka Naval School (1906), as well as at Moscow University named after A.M. Shanavsky (1908). The education via mail started to spread also in Australia and Canada. After 1917 a special model of extramural education was developed in Russia within which there was also the correspondence through mail envisaged. In 1960ies there were already 11 universities in the U.S.S.R. that had the departments of extramural education (studies) (Никитин, 2011).

Advocating "wireless university", famous educationalist and historian J. C. Stobart wrote to recently established BBC Company in 1926, substantiating the advantages of distance education at *an Open University*. In his turn, R. C. G. Williams argued for and implemented in practice the idea of "tele-university", namely, while working at *the Institution of Electrical Engineers*, he offered his prepared broadcast lectures combined with in advanced specially prepared and in advance sent

through mail the broadcast lecture materials. R. C. G. Williams offered such lectures also at the traditional universities, introducing in education the multi-media concept (History of the Open University, 2011).

In 1938 the first congress of International Council for Distance Education took place in Canada, where the issues of correspondence education (education via mail) were discussed (Open Learning and Distance Education., 1999).

As the development of the radio took place already during the World War I, but the television became a part of everyday life in 1950ies, it influenced also the development of educational environment. The conceptions of *outdoor education* emerged that were based on the accessibility and individualization of education, ensuring more opportunities for the development of homeschooling. Sound, video recordings, television, radio records became the important and widely accessible learning materials (Gunawardena, McIsaac, 2004). These materials laid the foundation for *the media pedagogy*.

In March 1963 the representatives of the UK Labour Party, who dealt with the issues of educational policy, under the chairmanship of Lord Taylor presented on the accessibility of higher education for all those interested in, even for the representatives of working class. They suggested carrying out an experiment using radio and television, establishing the University of the Air, within the framework of which the serious, sustainable conception of adult education would be developed and implemented according to plan. H. Wilson, the leader of the Labour Party was particularly inspired by the idea of distance education. He took an active part in the preparation and implementation of the project of the University of the Air (later called the Open University) by inviting several organizations to take part in it. Jennie Lee, the Minister for the Arts of Great Britain, held the same views and became the partner of H. Wilson. Thanks to her persistence and fortitude, 'the wall' of the lack of understanding and even stagnation in thinking was destroyed and there were established contacts in the spheres of education and culture with Chicago (the USA) and Moscow (the U.S.S.R.). The official document about the establishment of the University of the Air was published in 1966 that, by the decision of the Cabinet of Ministers, was renamed Open University in 1967. The first student started to study at the Open University two years later (in 1971). H. Wilson, the prime minister, who won at the elections, monitored the project of the Open University himself. The Queen of Great Britain herself opened the Open University. All the necessary measures were taken in order the university would become accessible for the masses and at the same time would be also a prestigious educational intsitution. Mike Pentz, the first dean of the Faculty of Science, who was a very charismatic personality, contributed a lot in ensuring the accessibility of distance education. Thus, the Open University was established in Great Britain in 1969 that later became the largest educational institution, where 200,000 students from all over the world studied by means of distance education. The name of the university itself proves that the education there is accessibile and democratic, because the tuition fee in the university is low, as well the students do not have to attend regular academic lectures at the study-rooms of the university. The French National Centre for Distance Learning (CNED) was also established in 1969. The following facts show the volume of its functioning: 2,500 different study courses; 350,000 students; branches in 120 countries; about 5,000 members of teaching staff were involved in the development and delivery of study courses; the most modern technical equipment, including, satellite television, video and audio equipment, e-mail, Internet, as well as the traditional study aids. The Public Broadcasting Service (PBS TV) was established also in the USA. According to its essence, it was the consortium of 1,500 colleges and television companies. PBS TV offered several study programs that were broadcasted on four TV channels. The most significant were PBS Adult Learning Service programs in different fields, such as science, business and management (History of the Open University, 2011; Marwick, 1976; Краткая история дистанционного образования, 2003).

Later, alongside with the establishment of above mentioned institutions in Great Britain and France, similar establishments were opened also in other European countries, as well as Asia. The National Level Network of Radio and Television Educational Institutions was developed in China in 1979, where the study process was implemented by means of the satellites of the Earth. Particularly rapid development of distance education took place in the international educational environment thanks to the introduction of ICT in everyday life, including also education. The age of the Internet use

in education began in the USA in 1980ies. For instance, in 1986 Charles Wedemeyer introduced the innovative media education at the University of Wisconsin, where all the opportunities of media were used, including also the latest information technologies, that was an important base for the development of distance education. The world-wide triumph of distance education started at the end of the 20<sup>th</sup> century. Very noticeable is *the National Distance Education University* (UNED) in Spain with 58 study centers in 9 countries, and Baltic University (BU) with its main office situated in Sweden (Stockholm) unites the centers of distance education in 10 countries. The Pennsylvania State University is recognized nowadays as a very prestigious institution of distance education. Its experience was used by UNESCO specialists, when developing the conception of virtual university (Gunawardena, McIsaac, 2004; НИКИТИН, 2011; Хапаева, 2007).

At the end of the 20<sup>th</sup> century 25% of all distance education programs in the USA represented the commercial education. Such companies as General Motors, J. C. Penney, Ford, Walmart, FedEx, using the corporate educational networks, offer their specialists the courses for the improvement of professional skills. IBM uses the environment of satellite education (Краткая история дистанционного образования, 2003).

The Conception on the Establishment and Development of the Uniform Network of Distance Education was adopted in Russia in 1994 (Васильева, 2002; Никитин, 2011).

Distance education emerged in Latvia in 1990ies.

Distance education in Latvia is defined as a form for acquiring education, where the basis is independent studies, but the direct and continuous contact with the lecturer basically is not necessary, therefore it is replaced by video lectures and communication by means of ICT. In conformity with the Education Law of the Republic of Latvia (LR Izglītības likums, 1998), distance education is defined as an extramural method for acquiring education.

Nowadays several higher education institutions in Latvia offer distance education opportunities. Riga Technical University is a leading institution of higher education in the sphere of distance education. The aim of the Distance Education Study Centre of Riga Technical University is to develop the opportunities of distance education in Latvia for everybody at the easy accessible university level, using the modern world's experience of distance education and technologies (Kas ir RTU., 2011).

The Latvia University of Agriculture also improves its e-environment, considering the accessibility and internationalization of its educational environment.

In 2009 the first distance education secondary school — Riga Distance Education Secondary School —started its activities in Latvia. At present it is the only such school Latvia implementing the accredited programs of secondary and basic education.

The studies on the history of the development of distance education, as well as the experience gained by the authors of the article concerning the sphere of distance education enabled to draw a conclusion that there had been several models of distance education developed in the course of time (Gunawardena, McIsaac, 2004; Tālmācības modeļi, 2011).

- 1. *The Correspondence Model* communication through writing (letters, written materials) prevails, and it is widely applied at Distance Education University Hagen.
- 2. *The Conversation Model* based on different collegial conversations, discussions between the adult and the member of teaching staff or the tutor (this model is widely applied at the Open University in Great Britain).
- 3. *The Teacher Model* the main role is allocated to the member of teaching staff, whose knowledge and experience are delivered to adults mainly by means of written materials. The task of the member of teaching staff is to encourage, motivate adults, to help them to define the study aim and the appropriate content, type, to have the feedback in order to define the quality of studies.
- 4. *The Tutor Model* the tutor assists, advises, helps to integrate into and adapt to the study process, and performs the functions of "an older colleague".
- 5. *The Technological-Extension Model* the essence of the model is the use of different kinds of information communication technologies within the study process (widely applied in Canada, Finland and other countries).

6. *Transactional Distance* – it, in fact, partially combines all the above mentioned models. At the beginning of 1990ies it was defined by Michael Moore, including in it self-education, information technologies and written materials.

The choice of the model of distance education depends on the specificity of educational institution and students' needs and self-education competences.

According to the authors' point of view, distance education with its considerable advantages in comparison to the traditional method used for acquiring education has a wide range of perspectives concerning development in Latvia. This would enable to make the educational environment more flexible, accessible, where it would be possible to implement the individualization of education according to each person's age, preliminary knowledge, skills and competences, state of health, abilities, interests, needs and plans for future.

## Conclusions

- 1. The origin of distance education could be found already in the period of Renaissance.
- 2. The ideas of the humanization, including individualization, as well as democratization of education, particularly the ideas of accessibility, became the base for the search and implementation of distance education.
- 3. Since the 18<sup>th</sup> century, when there was registered the first attempt of distance education, until nowadays the mankind has amassed rich experience in this field. Distance education as an extramural method for acquiring education has spread all over the world, including also Latvia.
- 4. Correspondence education is the initial form of distance education.
- 5. The development of information and communication technologies and their introduction into education facilitated the development of distance education in the 20<sup>th</sup> century.
- 6. In connection with the development of distance education, a new direction *media pedagogy* —began its development in pedagogy.

## References

- 1. Anna Eliot Ticknor 1823 1896. (2008). The Ticknor Society. [online] [20.10.2011]. Available at http://www.ticknor.org/Anna.shtml
- Colletta N.J. (1996). Formal, Nonformal, and Informal Education. In: Tuijnman A.C. (ed.). International Encyclopedia of Adult Education and Training. Second edition. France, Paris, Pergamo, pp. 22. - 27.
- Collins A., Greeno J.G., Resnick L.B. (1996). Environments for Learning. In: Tuijnman A.C. (ed.). International Encyclopedia of Adult Education and Training. Second edition. France, Paris, Pergamo, 960 pp.
- Dēķens K. (1919). Rokas grāmata pedagoģijā (Handbook in Pedagogy). Rīga, Kultūras Balss, 238 lpp. (In Latvian)
- Gunawardena Sh. N., McIsaac M. S. (2004) Distance Education. In: Jonassen D. H. (ed.) Handbook of Research for Educational Communications and Technology, 2nd New Jersey: Lawrence Earlbaum Ass. Incpp, pp. 355 – 396.
- 6. Hasan A. (1996). Lifelong Learning. In: Tuijnman A.C. (ed.). International Encyclopedia of Adult Education and Training. Second edition. France, Paris, Pergamo, pp. 33-41.
- History of the Open University (2011). Open University. [online] [20.10.2011]. Available at: http://www.mcs.open.ac.uk/80256EE9006B7FB0/(httpAssets)/F4D49088F191D0BF80256F870 042AB9D/\$file/History+of+the+Open+University.pdf
- Kas ir RTU tālmācības centrs? (2011). (What is RTU Centre of Distance Education?) Rīga, RTU. [online] [20.10.2011]. Available at http://www.vu.lv/index.php?option=com\_content&view=article&id=9%3Akas-ir-rtu-tlmcbasstudiju-centrs&lang=lv (In Latvian)
- Katane I. (2005). Lauku skolas kā izglītības vides izvērtēšanas modelis (The Evaluation Model of the Rural School as Educational Environment). Promocijas darbs pedagogijas zinātnes skolas pedagoģijas apakšnozarē. Jelgava, Daugavpils, LLU TF IMI; DU, 195 lpp. (in Latvian)

- Katane I. (2007). No ekoloģiskās paradigmas līdz vides modelim izglītības pētniecībā (From Ecological Paradigm till Environmental Model in the Research of Education). Monogrāfisko pētījumu sērija Izglītības ekoloģija. Jelgava, LLU, 239 lpp. (In Latvian)
- 11. Koķe T. (1999). Pieaugušo izglītības attīstība: raksturīgākās iezīmes (The Development of Adult Education: Characteristic Features). Rīga, Mācību apgāds NT, 102 lpp. (In Latvian)
- 12. Latvijas Republikas Izglītības likums (The Education Law of Republic of Latvia). (1998). Latvijas Vēstnesis, (17.11. 1998.), Nr.343. (In Latvian)
- Marwick A. (1976). History of the Open University. Oxford Review of Education, Vol.2, No 2. [online] [20.10.2011]. Available at http://www.jstor.org/pss/1050207
- 14. Open Learning and Distance Education in Canada (1999). Canadian Association for Distance Education, Councils of Ministers of Education, Canada. [online] [23.09.2011]. Available at
- 15. http://www.hrsdc.gc.ca/eng/hip/lld/olt/skills\_development/oltresearch/cadeapec\_e.pdf
- 16. Paul R.H. (1996). Experiental and Open Learning. In: Tuijnman A.C. (ed.). International Encyclopedia of Adult Education and Training. Second edition. France, Paris, Pergamo, 960 pp.
- Pestalocijs J.H. (1996). Darbu izlase (Selected Works). Veltīta pedagoga 250 gadu atcerei. Rīga: Latvijas Universitāte, 140 lpp. (In Latvian)
- Pittman V. (1991). Rivalry for respectability: collegiate and proprietary correspondence programs. Second American symposium on research in distance education. University Park, PA: Pennsylvania State University.
- 19. Raituma I. (2009). Skolas iekšējās un ārējās vides mijiedarbība (The Interaction of Inner and Outer Environment of School). Rīga, RaKa, 122 lpp. (In Latvian)
- 20. Rudītis A. (1933) Rūpju bērni mājās un skolā (Rude Children at Home and School). Rīga, autora izdevums, 63 lpp. (In Latvian)
- Skujiņa V. (red.) (2000). Pedagoģijas terminu skaidrojošā vārdnīca (The Dictionary of Pedagogical Terminology). Rīga: Zvaigzne ABC, 248 lpp. (In Latvian)
- Sutton P.J. (1996). Lifelong and Continuing Education. In: Tuijnman A.C. (ed.). International Encyclopedia of Adult Education and Training. Second edition. France, Paris: Pergamo, pp. 22.-33.
- Tālmācības vēsture (The History of Distance Education). (2011). Rīga, BVK. [online] [20.10.2011]. Available at http://www.talmaciba.lv/lv/interesu-izglitiba-talmacibas-vesture (In Latvian)
- 24. Tālmācības modeļi (The Models of Distance Education). (2011). [online] [21.08.2011]. Available at: http://www.talmaciba.lv/lv/pamatizglitiba-talmacibas-modeli. (In Latvian)
- 25. Yeaxlee B.A. (1920; digitalized 2007). An Educated Nation. H. Milford, Oxford University Press, 80 pp. [online] [11.11.2011]. Available at http://www.archive.org/stream/educatednation00yeax#page/18/mode/2up
- 26. Амонашвили Ш. (2001). Размышления о гуманной педагогике (Thoughts about Humanistic Pedagogy). Москва: Издательский Дом Шалвы Амонашвили, 464 с. (In Russian)
- 27. Васильева З.И. (ред.). (2002). История образования и педагогической мысли за рубежом и в России (The History of Education and Pedagogical Though Abroad and in Russia). Москва, Академия, 416 с. (In Russian)
- 28. Кларин В., Джуринский А. (сост.). (1988). Педагогическое наследие: Я.А. Коменский, Дж. Локк, Ж.Ж. Руссо, И.Г. Песталоцци (The Pedagogical Heritage). Москва, Педагогика, 412 с. (In Russian)
- 29. Константинов Н.А. (ред.). (1952). Очерки по истории педагогики (Essays of Pedagogical History). Москва: АПН, 755 с.
- 30. Краткая история дистанционного образования (The Brief History of Distance Education). (2003). Санкт-Петербург: Центр дистанционного образования «Элитариум». (In Russian)
- Никитин А.Д. (2011). Информационны технологии в обучении (Informative Technologies in Teaching), [online] [23.09.2011]. Available at http://asu.ugatu.ac.ru/library/46/ito\_lekciya\_9.pdf (In Russian)
- 32. Хапаева С.С. (ред.). (2007). Дистанционное образование: опыт и перспективы (Distance Education: Experience and Perspectives). Вып. 4. Москва, Диона, 84 с. (In Russian)

# CROSS-SCHOOL MENTORING AS A FACILITATOR OF SUSTAINABLE DEVELOPMENT OF RURAL SCHOOLS IN LATVIA

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Abstract: The ongoing changes in nowadays society fully influence education especially the sustainability of rural schools, and, vice versa, education has a very important meaning in the support and facilitation of a sustainable development as the acquisition of new information and experience exchange process among individuals, generations and particular parts of society in a certain field and other types of organizations, including rural schools. The authors of the article have been carrying out the researches on the fluctuation of educational environment of rural schools for several years as well as the seminar has been experimentally approbated as a form of cross-school mentoring for the facilitation of viability and sustainability of Latvian rural schools in the future perspective. The crossschool mentoring is one of many types of mentoring which the authors of the article has theoretically justified as well as experimentally approbated and evaluated its meaning under way of experimental researches. During mentoring process the authors of the article motivated the participants of seminars to look upon their own rural schools and to evaluate them as a rural self-developing educational environmental system, as whole community's opened educational environment, as a learning organization. The newly obtained information about rural schools in Latvia and abroad, made participants to search new initiatives of their own developmental ways, based on their and other Latvian and foreign rural schools' experience. The main results and conclusions of the researches are published.

Keywords: cross-school mentoring, educational environment, sustainable development, rural school.

## Introduction

The preservation of educational environment of rural schools is one of the most significant tasks for provision of sustainable education in Latvia. The sustainable development of rural schools can in great extent provide also the sustainability of rural cultural environment.

In the last four years the empirical researches of the authors of the article prove that nowadays in the conditions of economic crisis the part of schools try to find new innovative solutions of their own development, thus becoming the opened educational environment of the whole rural community. Rural schools carry out new additional functions, self-complicate, thereby becoming multi-functional and multi-structural educational environment.

At the same time there are such rural schools that in spite of existing threats wait solutions for their own developmental problems from 'above' or completely do not believe in any attempt to survive effectively thus they are relatively passive and inert. As a result such rural schools are closed each year in Latvia.

The authors of the article consider that the results of theoretical and empirical researches must be maximally available for all rural schools in Latvia that is why the meaning of cross-school mentoring in Latvian educational environment has become very notable.

The *aim of this article* is to publicize the results of researches that are acquired by evaluating prepared and organized seminars with the aim to exchange experience between seminar lecturers / mentors and rural schools in the context of sustainability.

## Materials and methods

Empirical researches are based on the ecological approach in the research of educational environment. There can be distinguished the directions of theoretical researches that serve as the theoretical and methodological base in our experimental researches.

- The ongoing changes in educational environment of rural schools of the 21st century, including the diversity of educational models of rural schools in Latvia and abroad (Dappen, Isernhagen, 2002; Howley, Harmon, 2000; Katane, 2005; Miller, 1995; Галковская, Раудсик, 2008; Дмитреева, 2004; etc.).
- 2. Education for sustainable development (Grabovska, Vereba, 2010; The UN Decade of Education for Sustainable Development (DESD 2005-2014) The First Two Years, 2007; etc.).
- 3. Rural school as an educational environment of community (Akande, 2007; Gjelten, 1982; Jarvis, 2001; Katane, 2005; Kerensky, 1989; Roga, 2008; Митина, 2004; etc.).
- 4. Rural school as a learning organization (Brandt, 2003; Dāvidsone, 2008; Fullan, 1993; Gephart, Marsick, Van Buren, Spiro, 1996; Senge, 1990; etc.).
- Cross-school mentoring in the school as a learning organization (Cranwell-Ward, 2004; Gay, 1995; Donaldson, Ensher, Grant-Vallone, 2000, Feiman-Nemser, 1996; Friedman, Arena et.al. 2004; Head, Reiman, Thies-Sprinthall, 1992; Pyatt, 2002 etc.).

The authors of the article have used the scientific theoretical practical seminar *Rural Schools as the Fluctuation of Educational Environment in Latvia and Abroad of the 21st Century* as the form of the cross-school mentoring that was organised in October and November, 2011 with the aim to provide the exchange of innovative working experience among rural schools that promotes and facilitates further self-development and sustainability of rural schools in Latvia.

The seminars were organized in two regions of Latvia – Latgale and Zemgale, involving 17 Latvian rural schools (5 secondary schools and 12 basic schools) with 111 experts (teachers, administration staff of rural schools and coordinators of educational work of rural schools of Regional Educational boards) that represent Livanu, Riebinu, Vecumnieku, Tervetes districts.

There were included significant results of theoretical and empirical researches on rural schools as educational environmental systems in the content of mentoring seminars.

Each seminar consisted of two main parts (theoretical and practical parts):

- the theoretical part is very informative as it, firstly, is connected with the aspects of functioning of rural schools abroad, for example, educational environmental models of foreign rural schools, tendencies that enter the educational field of rural schools abroad, etc. and, secondly, it is related with the historical facts of development of the term *rural school* in Latvia, tendencies, educational environmental models of Latvian rural schools nowadays and other aspects;
- but the practical part refers to the efficient input of experts, first of all, in the modelling of the visions of the future sustainable development of rural schools based on Walt Disney's model (according to O'Connor, Seymour, 1994) where Walt Disney future visions or developmental scenarios defined as the dreamer, the spoiler, the realist and according to these roles the future development visions are divided into: optimistic, pessimistic and realistically possible vision, secondly, the participants of the seminars revealed the guarantee of prestige and success of Latvian rural schools. What is more, the experts presented their future developmental visions, thus sharing their ideas with other experts.

There was included the results of empirical researches of the authors in the context of mentoring about educational environmental models of Latvian rural schools. In the conditions of nowadays changes many rural schools search solutions of viability problems, thus there is a diversity of educational environmental models of rural schools. As a result of analysis and evaluation, the authors of the article have divided educational environmental models of rural schools in four main groups:

1. *Traditional educational environmental models* offer the most widespread educational environmental models such as a basic or secondary rural school. These are rural schools which functioning responds to the Educational Law of Latvian Republic, the school's functions correspond to pupils' audience accordingly to basic or secondary school's educational programs. The school's operation is without any changes because, firstly, *the school's administration does not see any danger for school's existence* and *sustainability in future*, there is enough number of pupils and set of forms

that have not substantially changed in the last years, that is why the rural school does not want to change anything in its every day work because the basic audience is saved – schoolchildren and youngsters, secondly, the *school's administration and all personnel perceive danger of school's existence and its sustainability in future* because the number of pupils and forms have decreased or it has been always a situation that the amount of pupils and forms were very low. Therefore the school as an environmental system is not opened to changes from inside - ("from the bottom"), but waits for favourable reforms from outside - ("from the top").

2. Educational environmental models of structural reorganization include multi-structural educational environment. It is related to comprehensive schools that as a result of the optimization in the time of the reform in 2009/2010 school year have become the component of the multi-structural educational environment or substructure:

- have become a multi-structural educational environmental center that has got one or more branch offices;
- have lost their independence and were joined to some rural secondary school or basic school in such way becoming the branch office of this particular school.

3. Multi-functional and multi-structural educational environmental models within the framework of one school encompass rural schools that offer multi-divisional educational environment for all rural community because the rural schools are social-cultural environments which offer the formal and non-formal education in the aspect of life-long and wide-long learning. By broadening target audience and functions in the aspect of a person's age period 'down' – preschool and school age children and 'up' – adult formal and non-formal education, rural schools as an educational environment system form new substructures.

4. *Combined (mixed) educational environmental models* include the features of a multi-structural and multi-functional educational environmental model. The rural school as a multi-structural educational center or as a branch office broadens its functions and increases its target audience by offering a wide range of formal and non-formal educational programmes.

The research on educational environmental models of Latvian rural schools reflects that educational environment is changing and will be undergoing several changes in the rural areas of Latvia even next years because reorganization and closure of schools are still in the realization process. It becomes diverse in structure allowing to attract investments and broader the educational facilities for native inhabitants of a particular rural district. Unfortunately, no one can foresee how long a certain rural school will function, as changes are rapid and unpredictable.

There are used such *research methods* for the experimental approbation of cross-school mentoring: questionnairing as data acquisition method with the aim to receive the feedback of the organized seminars and Kendall's W Test as data procession method.

## **Results and discussion**

• *Results.* The questionnaire was prepared before the seminars that consists of seven evaluation criteria that had to be assessed in the scale from 1 (a very low assessment) to 10 (a very high assessment) by participants in the end of seminars.

Summarizing the results of evaluation criteria of mentoring seminars, the authors of the article have summed and systemized them in the table 1 according to the sequence of seminars. (Table 1).

The statistical analysis of evaluation criteria of the questionnaire shows that the participants of seminars very highly evaluated:

- the mentor competence as a lecturer in the topic of the seminar (Evaluation  $\sum$  of all five seminars = 956 points);
- the topicality of the topic of the seminar in the context of viability, fluctuation and sustainability the rural schools' environment (Evaluation  $\sum$  of all five seminars = 938 points);
- the meaning and motivating character of the seminar for creative and innovative thinking and pedagogical activity to facilitate viability and promotion of prestige of rural school (Evaluation ∑ of all five seminars = 892 points).

## Table 1.

## The Evaluation of Meaning of Mentoring Seminars in the Point of View of Participants

Ν	Evaluation Criteria	Sem. 1	Sem. 2	Sem. 3	Sem. 4	Sem. 5	All seminars
		Ν	N	N	N	Ν	In total: N
		29 respondents	12 respondents	27 respondents	19 respondents	24 respondents	111 respondents
		Evaluation	Evaluation	Evaluation	Evaluation	Evaluation	In total: Evaluation
		Max ∑290	Max ∑ 120	Max ∑ 270	Max ∑190	Max ∑240	<b>Max</b> ∑ 1110
		Evaluation $\sum$	In total: Evaluation $\sum$				
1.	The topicality of the topic of the seminar in the context of viability, fluctuation and sustainability the rural schools' environment.	238	101	238	152	209	938
2.	The meaning and motivating character of the seminar for creative and innovative thinking and pedagogical activity to facilitate	205	100	229	139	219	800
	viability and promotion of prestige of rural school.						892
3.	The novelty of gained information regarding foreign rural schools.	210	101	214	146	209	880
4.	The novelty of gained information regarding Latvian rural schools.	208	96	219	141	206	870
5.	Seminar as a form of cross-schools' mentoring that promotes exchange of experience and assessment of rural schools.	210	94	220	140	201	865
6.	The meaning of cross-school mentoring seminar in the facilitation of rural school as a learning organization.	205	96	214	140	203	858
7.	Mentor competence as a lecturer in the topic of the seminar.	231	107	244	158	216	956

In order to find out how the assessments of all participants of five seminars match in seven evaluation criteria of the questionnaire, the secondary processing was done, using Kendall's W Test, SPSS software programme. The following data was obtained. (Table 2)

Table 2.

Ν	5
Kendall's W	0.533
Chi-Square	15.985
df	6
Asymp. Sig.	0.014

## Kendall's W Test Statistic

To sum up, Kendall's concordance coefficient (W = 0.533) approaches more "1" than "0",

•  $\chi^2 = 15,985 > \chi^2_{0,05;6} = 12,59,$ 

• but  $p - value = 0,000 < \alpha = 0,05$ ,

meaning that there is statistically important concordance among all participants of five mentoring seminars.

• **Discussion.** As cross-school mentoring is the last phase of the research, it gained a very important place for encouraging and motivating rural schools, to search and work out creatively development strategies, concepts, programmes as well as innovative educational environment's models, therefore the authors of the article give a short insight in the theoretical justification of experimental researches.

Since the early 1980s, when mentoring burst onto the educational scene as part of a broad movement aimed at improving education, policymakers and educational leaders have pinned high hopes *on mentoring as a vehicle for reforming teaching* and *teacher education* (Feiman-Nemser, 1996).

F.A. Head, A.J.Reiman and L. Thies-Sprinthall (Head, Reiman, Thies-Sprinthall, 1992) believe that mentoring can make a difference for teachers, but it needs to be real mentoring complete with its complexity in process and function.

The historical research on the term *mentor* shows that it is derived from the Greek word meaning "to advise" and comes from the Indo-European root *men* meaning "to think." The term is generally traced back to Homer's *The Odyssey*, in which Odysseus left Mentor, his trusted friend, in charge of his household and the education of his young son, Telemachus, when he left to fight in the Trojan War.

More importantly, however, "the role of mentor was filled when Athena, the Greek goddess of wisdom, intellect, and invention assumed the form of Mentor to give counsel and advice to Telemachus. In taking the shape of Mentor, Athena provided her guidance and wisdom to ensure that the young man had the proper education and understanding that were necessary for him to grow into the leader that he was expected to be." (Friedman et al, 2004)

Nowadays the mentor plays a very significant role in the process of mentoring, thus the authors of the article give several examples of the term *mentoring*:

- Mentoring is the process of serving as a mentor, someone who facilitates and assists another's development. The process includes modelling because the mentor must be able to model the messages and suggestions being taught to the beginning teacher (Gay, 1995).
- Mentoring is a term generally used to describe a relationship between a less experienced individual, called a mentee or protégé, and a more experienced individual known as a mentor. Traditionally, mentoring is viewed as a dyadic, face-to-face, long-term relationship between a supervisory adult and a novice student that fosters the mentee's professional, academic, or personal development (Donaldson, Ensher, Grant-Vallone, 2000).

• Mentoring is a voluntary and reciprocal interpersonal relationship in which an individual with acknowledged expertise shares his or her experience and learning with another (less experienced) person. Mentoring relationships are typically long term and are based on trust and mutual respect. The mentoring relationship goes beyond the role of professional advisor to focus on both the personal and professional growth of the individual (Friedman, Arena, 2004).

It can be concluded that mentoring is the process of support to a particular individual who needs a professional and educational guidance and supervision in order to develop its own personality thus broadening experience and knowledge.

There are myriad benefits associated with mentoring, and they are as unique as the people involved in the mentoring relationships. Yet some general benefits exist. In terms of these *benefits*, mentoring: allows for increased self-awareness and self-discipline; provides an expanded personal network; offers a proven method to share ideas, try new skills and take risks; enhances the capacity to translate values and strategies into productive actions; improves awareness of personal biases, assumptions and areas for improvement; increases technical and professional expertise; creates a culture of acceptance and inclusion; reinforces cultural norms and values; allows mentees to have a smoother transition into the workforce to further professional career development; renews mentors' enthusiasm for their role as expert (A Booklet Benefits of Mentoring, 2007).

There exist different *types of mentoring*, for example (Cranwell-Ward, 2004; Pyatt, 2002):

- *Peer mentoring* is set up between people of equal level or status in organization. Potential benefits from peer mentoring are different for example: making mentoring available in a wider audience, developing skills of individuals, giving people the opportunity to find out about other areas of the organization on a more formal basis etc.
- *Cross-company mentoring* involves a reciprocal arrangement whereby managers from one organization set up mentoring relationships with managers in another, instead of mentors and mentees both being from the same organization. Unlike peer mentoring, cross-company mentoring seems to require a significant level of formality to be taken seriously. Choosing which company to pair with needs careful thought: if the culture and environment are too different, the participants may see no value. Pairing with an organization from the same sector, but which is not an outright competitor, would be the ideal.
- Another venture into alternative ways in which to set up a mentoring scheme is the idea of *group mentoring*. This can be useful where the supply of mentors is a problem. Group mentoring can also be the "scheme of choice", when there is an appropriate group of potential mentees who would benefit from the same kind of mentoring form, the same mentor. This would be particularly likely with members of the same work, for example, and where there was a specific objective as an outcome for the mentoring.
- *Cross-school mentoring* that is used for different educational reasons, for instance, training and implementing a peer mentoring strategy.

Thus mentoring is very useful in sphere of education because it gives theory and practice, it helps to improve and develop organizational culture of any educational establishment, thus enhancing communication, giving better understanding of its vision and mission for teaching and administration staff of the schools.

## Conclusions

- 1. Cross-school mentoring has several cooperation forms, namely, cooperation among: 1) mentor and one school's representatives (teachers); 2) several schools' representatives; 3) mentor and more schools' representatives, who share and exchange experience, gaining new and necessary information for schools' development.
- 2. Cross-school mentoring provides sharing with knowledge, experience, support provision to representatives of schools in particular questions that are opened for professional development as well as broadening view that guarantee team work for facilitation sustainable development of schools.

- 3. One of cross-school mentoring forms is a seminar that is purposefully planned, contentstructured and evaluated, by mentor/mentors cooperation with representatives of schools but mostly with school managers.
- 4. Cross-school mentoring's seminars have many advantages and some disadvantages. For example, *advantages* are: the participation of the majority of representatives of the particular school; the knowledge acquisition in the concrete issue; the possibility to share experience with the representatives of other schools and learn new practical things in the connection with the topic of the seminar; the solving of particular problems and questions; the use of evaluation skills; the facilitation of the cross-school cooperation and getting into the contact with other representatives of the seminar and as a result of this cooperation the collaboration cross-schools nets are formed. If mentors are researchers, the newest results of researches and scientific cognition are delivered to the participants of the seminar that is a form of mentoring. The main *disadvantages* of the cross-school seminars are: the barrier of communication, shyness and timidity of participants to take part in conversations; an inability to overcome a psychological barrier, exchange experience and viewpoints on the subject; a mutual competition among schools of one district and the neutral, unmotivated attitude towards the work of the seminars.
- 5. On the whole, the evaluation of all seven criteria of participants of seminars is very high and high because they are above average indicators. The participants of seminars highly evaluated:
- the mentor competence as a lecturer in the topic of the seminar;
- the topicality of the topic of the seminar in the context of viability, fluctuation and sustainability the rural schools' environment;
- the meaning and motivating character of the seminar for creative and innovative thinking and pedagogical activity to facilitate viability and promotion of prestige of rural school.

The results of the Kendall's W Test prove that there is statistically important concordance among all participants of five mentoring seminars.

6. The evaluation of participants of seminars allows concluding that mentoring seminars have a very significant meaning in the facilitation of sustainable development of rural schools as it involves considerable number of participants of rural schools, reveals recent novelties of the topic, educates people on the place and provides practice.

## References

- 1. A Booklet Benefits of Mentoring, (2007). A Booklet by Triple Creek Associate, [online] [28.11.2011]. Available at <u>http://www.3creek.com/booklets/BenefitsBooklet.pdf</u>
- 2. Akande J.O. (2007). The practice of community education in Nigeria. *Educational Research and Review*, Vol. 2 (10), pp. 264- 270.
- Brandt R. (2003). Is this school a learning organization? 10 ways to tell. *National Staff Development Council*, Vol. 24, No.1, pp. 10-16, [online] [18.07.2011]. Available at <a href="http://www.scsk12.org/SCS/departments/Professional-Development/pdfs/Is-This-School-Lrn-Org.pdf">http://www.scsk12.org/SCS/departments/Professional-Development/pdfs/Is-This-School-Lrn-Org.pdf</a>
- 4. Cranwell-Ward J. (2004). *Mentoring: a Henley review of best practice*. Basingstoke, Hampshire, New York, N.Y.: Palgrave/Macmillan, 256 pp.
- 5. Dappen L., Isernhagen J.C. (2002). TeamMates: A Model to Support Mentoring in Rural Schools. *Journal of Research in Rural Education*. Winter, 2002. Vol. 17, No, 3, p. 154 -161
- 6. Dāvidsone G. (2008). *Organizāciju efektivitātes modelis* (The Effectiveness Model of Organizations). Jelgava, SIA O.D.A., 329 lpp. (in Latvian)
- 7. Donaldson S. I., Ensher E. A., Grant-Vallone E. J. (2000). Longitudinal exa mination of mentoring relationships on organizational commitment and citizenship behavior. *Journal of Career Development*, 26, pp. 233-249.
- 8. Feiman-Nemser Sh. (1996). Teacher Mentoring: A Critical Review. ERIC Digest. ERIC Clearinghouse on Teaching and Teacher Education Washington DC. P.6 ED397060
- 9. Friedman K.P., Arena, Ch., et.al. (2004). Report of the ADEA President's Commission on Mentoring. *Journal of Dental Education*, Volume 68, Number 3, pp. 390 396.
- 10. Fullan M.G. (1993). *Change forces: Probing the depths of educational reform*. London, Falmer Press, 162 pp.

- 11. Gay G. (1995). Modeling and mentoring in urban education. *Education and Urban Society*, V.28 N.1, pp. 103-118
- 12. Gephart M.A., Marsick V.J., Van Buren M.E., Spiro M.S. (1996). Learning Organizations Come Alive. *Training and development*, No. 50, pp. 35-45.
- 13. Gjelten T. (1982). A Typology of Rural School Settings, [online] [10.02.2009]. Available at <u>http://www.nordregio.se/spespn/Files/2.3.ruralareas.pdf</u>
- 14. Grabovska R., Vereba D. (2010). Desmitgade izglītība ilgtspējīgai attīstībai: situācijas raksturojums Latvijas izglītībā (Decade Education for Sustainable Education: the Characteristics of Situation in Latvian Education). *Ilgtspējīga attīstība praktiskā pieredze izglītībā*. Daugavpils, Asociācija izglītība ilgtspējīgai attīstībai, 7.-19.lpp. (in Latvian)
- 15. Howley C. B., Harmon H. L. (Eds.) (2000). Small high schools that flourish: Rural context, case studies and resources. Charleston, WV, AEL, Inc.
- 16. Head F. A., Reiman A. J., Thies-Sprinthall L. (1992). The Reality of Mentoring: Complexity in Its Process and Function. In: Bey T., Holmes C. T. (Eds.). *Mentoring: Contemporary Principles and Issues*. Reston, VA, Association of Teacher Educators.
- 17. Howley C. B., Harmon H. L., (Eds.) (2000). *Small high schools that flourish: Rural context, case studies and resources*. Charleston, WV, AEL, Inc.
- 18. Jarvis P. (ed.). (2001). *The Age of Learning: Education and the Learning Society*. London, Kogan Page.
- Katane I. (2005). Lauku skolas kā izglītības vides izvērtēšanas modelis (The Evaluation Model of the Rural School as Educational Environment). Promocijas darbs pedagogijas zinātnes skolas pedagoģijas apakšnozarē. Jelgava, Daugavpils, LLU TF IMI; DU, 195 lpp. (in Latvian)
- 20. Kerensky V.M. (1989). *The Sovereign New Perspectives on People, Power and Public Education*. Iowa, Kendall/Hunt, 121 pp.
- 21. Miller B.A. (1995). The role of rural schools in community development: Policy issues and implications. *Journal of Research in Rural Education*, 11(3), pp. 163-172.
- 22. O'Connor J., Seymour J. (1994). *Training with NLP: Skills for managers, trainers and communicators*. London. Thorsons.
- 23. Pyatt G. (2002). Cross-school Mentoring: Training and implementing a peer mentoring strategy. *Mentoring & Tutoring: Partnership in Learning*, <u>Volume 10</u>, <u>Issue 2</u>, pp. 171-177.
- 24. Roga V. (2008). Sociālā pedagoga ekoloģiskās kompetences veidošanās lauku kopienā (Formation of the Social Pedagogue's Ecological Competence in Rural Community). Promocijas darbs sociālajā pedagoģijā. Rīga, LU, 308 lpp. (in Latvian)
- 25. Senge P.M. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York, Doubleday, 384 pp.
- 26. The UN Decade of Education for Sustainable Development (DESD 2005-2014) The First Two Years. (2007). United Nations Educational, Scientific and Cultural Organization. pp. 64, [online] [27.04.2010] Available at http://unesdoc.unesco.org/images/0015/001540/154093e.pdf
- 27. Галковская И.В., Раудсик Е.А. (2008). Профессионально-ориентированный сельский лицей перспективная модель инновационного образовательного учреждения. (The Professionally Oriented Rural Lyceum the Perspective Model of Innovative Educational Establishment). Москва, 102 с. (in Russian)
- 28. Дмитреева М. В. (2004). Апробация модели сельский социокультурный комплекс. (The Approbation of Rural Social-Cultural Complex), [online] [11.02.2011]. Available at <a href="http://itn.ru/communities.aspx?cat\_no=14947&d\_no=14948&ext=Attachment.aspx?Id=4085">http://itn.ru/communities.aspx?cat\_no=14947&d\_no=14948&ext=Attachment.aspx?Id=4085</a> (in Russian)
- 29. Митина А. М. (2004). Дополнительное образование взрослых за рубежом концептуальное становление и развитие. (The Adult's Further Education beyond Boundaries of Conceptual Growth and Development). Москва, Наука, 304 с. (in Russian)

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Abstract: Learning region is a region that develops on targeted education base of people who live and work there. The needs identified and defined to its identity and its maintenance-based in order to develop its competitive opportunities by investing in social capital's increase. The principle of continuous learning is realized in the region, because development of human resources is a part of the region's development strategy. Local government involvement in development of the region is one of the cornerstones to ensure sustainable strategy in public development. Cooperation network is one of learning region operation main instruments. Production enterprises, educational institutions and local authorities are engaged in this cooperation network. Educational institutions occupy a central position in cooperation network. Networks of educational institutions also are established in all learning regions, thereby identifying and coordinating human and material resources. The concept of learning region in Latvian municipalities still is unknown, but sufficient structure is established in order to initiate the formation of such regions.

**Keywords:** education policy, educational institution, education management, learning region, resources.

#### Introduction

Development and substantiation of relatively new education system models takes place in today's changing socio-economic situation in Latvia. This process is updated by results of administrative reform. Learning regions are designed and developed in many European countries during some time, which are recognized by both theorists (Longworth, 2006; Schaffer, 2010; Simm, 2005, etc.) and practices as effective lifelong education promotion and knowledge management tool in a particular area, which at the same time ensures the development of learning region. Aim from this article is analyzing it possible to learning regions development necessity was substantiated and its formation opportunity was determined.

#### Materials and methods

In this article, analyzing cognitions of theorists, the European countries' experience, as well as all information about management of education and regional development, information was available in official websites of Latvian regions.

#### **Results and discussion**

M. Fulan, talking about changes and its necessity in today's society, indicated to society capable of learning as to significant resource. "Development of society capable of learning is the obligation of all society, not only because education cannot perform it alone, but also because we are talking about an adaptive society, not just about an adaptive school system. In order to learning process may affect society as a whole, all types of organizations and institutions must be persistent and must to learn."(Fulans, 1999)

Learning regions is a region that develops on targeted education base of people who live and work there. "Targeted education" has to be emphasized especially here. Namely, the region is provided not just varied education, but professional and part of adult education are planned in accordance with needs of region's development and forecasts of labor market development. (Longworth, Osborne, 2010)

Thus, each region can provide exactly required knowledge development. It means that formulating and implementing the vision of regional development, the fact of what competencies will be needed by people for a long time in order to this vision could be implemented, and how these authorities could be obtained, first of all, identifying the opportunities of the region to provide them, is

also foreseen. Local government involvement in development of the region is one of the cornerstones to ensure sustainable strategy in public development.

However, in addition to specific needs of each region, there are overall benefits. For example, 39 learning regions were developed in Austria, within the EU program for regional development in 2007 -2013.

The purposes approved by the Ministry of Welfare (Lebensministeriun) are the following. (Die Netzwerke in den Lernenden Regionen, 2010):

- to consolidate learning as a regional thematic field;
- to develop in common an exciting educational offer and related projects;
- to improve the sustainability of the region and the region's quality of life.

Like in Austria, also in Germany, learning regions are formed by the EU Social Fund resources. In this country the German Federal Ministry of Education and Research (Bildung und Forschungsministerium) is promoted the establishment of 70 learning regions across the country.

The purposes are the following (Die Netzwerke in den Lernenden Regionen, 2010):

- to develop regional learning culture,
- to make it possible to improve education and lifelong learning.

Whereas, in the UK learning regions are created by initiative of local governments, which is seeking to use existing resources in their territory effectively. Although learning regions are developed independently, but also British learning regions have the common objective: to provide development of educational culture and educational traditions in the region.

Direct costs for establishment and development of learning region to local government are relatively low, but the benefit is enormous, because it helps to develop cooperation culture between various education providers that operate in the same area. (*Gwydri Learning Region*, 2009)

We can talk about valuable learning region, if management of the region and its population have clear conception about the region's development needs (because the region has structured future market), recovery of professional structures takes place constantly. Based on these concepts, the system is developed and operates in the region, which determines authorities` future requirements, as well as development and support assessment system is developed. (Longworth, 2006).

For example, in Austria, in Danube land, in Traiseland Tullnefeld learning region (der Lernende Region Donauland Traisenland Tullnerfeld) as a result of purposeful operation, since 2007, the following areas developed successfully (Die Netzwerke in den Lernenden Regionen, 2010) :

- tourism / culture / gastronomy / cooking / catering industry,
- agriculture / agricultural products processing / catering industry / direct trade,
- textile production,
- power industry / ecology /nature protection,
- education and cooperation in the region,
- generation mutual integration,
- health and health care,
- promotion of information and communication about information.

As you can understand from previous example, learning region is characterized by the fact that the needs identified and defined to its identity and maintenance-based in order to develop its competitive opportunities by investing in development of human resources. Thus, in the region the principle of continuous learning is realized, because development of human resources is a part of the region's development strategy (Longworth, 2006). The network information system is developed that supports learning and promotes innovation in planning and implementation in the region (Simmie, 2005).

Cooperation network is one of learning region operation main instruments. Production enterprises, educational institutions and local authorities are engaged in this cooperation network. During 3-9 months the strategy is developed, which further will be implemented via projects in education (Fig.1).

Regardless of the project is implemented by all cooperation partners, by part of cooperation partners or only by one cooperation partner, as the author of the project is considered the entire network. (Die Netzwerke in den Lernenden Regionen, 2010).

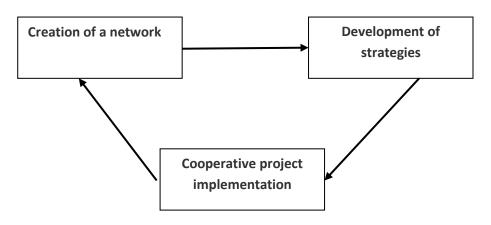


Figure 1. Operation of the network training in the region

An educational institution is not an autonomous institution. From the angle of school system theory (school organization social theory, structural functional theory, and historical materialistic school theory) it is the subsystem of the other system (in this case, regional). After analyzing social functions of the school (Table 1) it can be concluded that in the context of the region's development these functions refer to each person and, therefore, provide the implementation of the region's education policy. These functions are directly associated with learning region's mission and objective.

German educator H. Gudjon indicated four public functions of the school (Gudjons, 1998), but analyzing legislation of Ministry of Education and Science of the Republic of Latvia, it is evident that five functions are delegated to public schools of the Republic of Latvia. (Vispārējās izglītības likums, 2011; Izglītības likums, 2011; Profesionālās izglītības likums, 1999; Izglītības attīstības pamatnostādnes 2007.-2013.gadam, 2006).

Table 1

Functions	Description				
Qualification function:	general Qualifications;				
	specific Qualifications.				
Selection and allocation	allocation according to qualifications;				
function:	distributed among its achievements.				
Integration and legitimation	the integration of social norms and values;				
function:	legitimation of society's values and principles.				
Transfer of the cultural	tending of tradition;				
heritage function:	development of culture.				
Defensive and support	prevention of unemployment and social adverse				
function:	effects;				
	support an individual's personal development.				

Social functions of the School

If regional government clearly recognized social functions of the school (Table 1), the educational institutions are considered as important resource that provides development of the region. Then also

educational institutions, which are located in this area, will be involved purposefully in solution of tasks for the region's development, giving clear tasks.

Acquainted with learning regions activities of various states, it is obvious that everywhere educational institutions occupy one of the main places in cooperation networks; in addition to that, networks of educational institutions also are established everywhere, thereby identifying and coordinating the resources (Gwydri Learning Region, 2009; Die Netzwerke in den Lernenden Regionen, 2010; *Lernende Regionen* - in Oesterreich, 2010).

To understand what is necessary in order to learning regions will be established in the Republic of Latvia, it was examined, whether and what steps have been done in this direction after the administrative reform. (Par Profesionālas izglītības iestāžu..., 2010).

After the administrative reform in the Republic of Latvia 110 different-sized counties and 9 republic cities were established in the Republic of Latvia. After analyzing the information about all counties and cities from official web site – chapters "Regional government structure", "Education", "Adult Education", "Development Plan" the following facts were established: in all regional governments standing committee of deputies in issues of cultural education and sport is created.

Further the facts were summarized about how education is managed and coordinated at executive level (Table 2).

Table 2

Education administration		Education departments	Education specialists	No information	
Districts	25	18	21	43	
Cities	5	1	-	1	

## Coordination of educational institutions activities in districts

Acquainted with regional governments, departments and specialists functions in education, it is evident that their mission is implementation of education policy in the county.

In addition, in four counties the Vice-chairman of city council with responsibility for educational issues is elected; in two counties the Executive Director or Deputy Executive Director with responsibility for educational issues is elected.

In some regional governments, out of education management institutions coordinators or educationalists of adult education operate, it allows to suggest that in these counties adult education is artificially separated from education in general. In the first county education specialist operates in County Development department, whereas in other counties it operates as an autonomous employee of city council. The chapter "Education" of one republic city on website was not found.

The information, which is available on websites of local governments, about education and adult education activities, indicates that education, as well as culture and sport, from the angle of local government management, is considered as the service that is offered and provided in county. Most of adult education activities are related to informal interests' education, furthermore, they do not relate to formal education institutions and their educators.

While in learning regions in Austria, Britain, Germany and other countries, adult education is offered in more comprehensive spectrum, and in mentioned learning regions main educators are teachers of regional educational institutions. These teachers are considered as experts and approved professionals in the field of education. Cooperation network of educational institutions, established in learning regions, helps purposefully to implement the region's education policy.

As example we can mention activities of one British learning region (Gwydri Learning Region), where the commune uses learning region as a tool to implement objectives of education and development.

The commune put the following objectives for learning region (Gwydri Learning Region):

- to establish management structure that will support the organization, being engaged in formation of its vision;
- to promote that each member of the community would be participated fully in learning activities of the community;
- to improve existent practice of education and learning in the community;
- to ensure that needs of the region's future employment would be taken into account, planning teaching adequately.

In official websites of Latvian governments information is available only about educational systems, which are established by local governments, although it is possible, that in local governments territories also other educational systems or its branches operate, which are established by other physical persons or legal persons, and mentioned educational systems also make its contribution to development of the county`s or city`s education. If these opportunities would be identified, they can be used purposefully in implementation of the county`s education policy.

It is important to remember that one of major public tasks nowadays is the development of society, which is capable to learn.

"The changes have to be concentrated on all public institutions and its interactions, whereas the special task of education is to walk forward and to help in keeping the right direction" (Fulans, 1999). And learning region, as experience shows, can ensure the implementation of this requirement successfully.

Analyzing regional development plans, it can be concluded that anywhere only natural resources (land, forests, minerals, etc.) are specified as the development resources, but human resources and opportunities of educational institutions in improvement of educational quality are not mentioned at all, although in the EU documents from the 90s special emphasis was given to knowledge-based society, which is capable to learn. Also to plan development of enterprises and business activities, the potential of the county's educational institutions is not considered.

In all local governments Development departments are established, but unfortunately, in activities of these departments development of education and educational opportunities for promotion of development are not prognosticated. However, it should be noted that in Development department of one local government the Superior of educational projects was elected. And also in one local government the specialist of the field of education is elected by personnel of Development department. Unfortunately, these are only two local governments of 119 local governments.

All above mentioned facts allow concluding that the idea of learning region in Latvian local governments is still unknown, but sufficient structure is established in order to begin the formation of such regions. However, not every region can become the learning region. The part of the counties are too small, and these counties need the network of varied educational institutions, which is one of the preconditions for effective learning region, however, always there is the possibility for several counties to unit and to establish one learning region.

P. Senge (Senge, 1990) in one of his research indicated to the Greek word "metanoia", which can be translated as "an essential intellectual change". This is exactly what is needed in order to change social attitude to education in general, but to adult education most of all.

"People with high level of personal mastery live in continuous learning mode (..), personal mastery is not characteristic. It is a process. It is a discipline during life. People who have high personal mastery, are clearly aware of own lack of knowledge, incompetence and the areas, where they have still to develop. And they are intimately satisfied themselves". (Senge, 1990)

Acquainted with the experience of learning regions` development and management in European countries, it can be concluded certainly, that also in Latvia it is possible to form and to develop learning regions.

## Conclusions

- Learning region is a region that develops on targeted education base of people who live and work there.
- Learning region is used as effective tool for maintenance and development of adult education and lifelong learning, as well as for implementation of education policy in society.
- Coordination and management of educational institutions activities in most of Latvian regions has provided successful structure that could serve as the base for formation of regional cooperation networks.
- Education in Latvian regional governments is positioned as the service rather than as the resource for improvement of human capital.
- In Europe mainly two approaches for development of learning regions are used: the state as the initiator (for example, Germany, Austria); regional government as the initiator (for example, UK).

## References

- 1. *Die Netzwerke in den Lernenden Regionen*. (2010) [online] [07.12.2011]. Available at <u>http://www.lernende-regionen.info</u> (In German)
- 2. Education Introduction. (2009). [online] [05.12.2011]. Available at http://www.thi.org.au
- 3. Fulans M. (1999). *Pārmaiņu spēki*. (Change Forces ) Rīga, Zvaigzne ABC, p. 166. (In Latvian)
- 4. Gudjons H. (1998). *Pedagoģijas pamatatziņas*. (Basic insights pedagogy), Rīga, Zvaigzne ABC, p. 394. (In Latvian)
- 5. *Gwydri Learning Region* (2009). [online] [05.12.2011]. Available at <u>http://www.gwydrilearningregion.nsw.edu.au</u>
- 6. *Izglītības likums* (2011). (The Education Law), [online] [15.06.2011]. Aviable at <a href="http://www.likumi.lv/doc.php?id=50759">http://www.likumi.lv/doc.php?id=50759</a> (In Latvian)
- 7. *Izglītības attīstības pamatnostādnes 2007.-2013.gadam* (2006). (Education Development Guidelines for 2007 to 2013) [online] [15.06.2011]. Aviable at http://izm.izm.gov.lv/normativie-akti/politikas-planosana/1016.html (In Latvian)
- 8. **Lernende Regionen -** *in Oestrrreich* (2010) (Lerrning regions), [online] [05.12.2011]. Available at <u>www.lernende-regionen.at</u> (in German)
- 9. Longworth N. (2006). *Learning Cities, Learning Regions, Learning Communities: Lifelong Learning and Local Governement.* London, Routlegde, p. 248.
- 10. Longworth N., Osborne M. (2010). *Perspectives on Learning Cities and Regions: Policy, Practice and Partipation*. London, Natl Ins of Adultcontinuing, p. 320.
- Par Profesionālas izglītības iestāžu tīkla optimizācijas pamatnostādnēm 2010.-2015.gadam (2010). (Framework optimization of network Professional education institutions 2010 to 2015), [online] [15.06.2011]. Aviable at <u>http://www.likumi.lv/doc.php?id=203373</u> (In Latvian)
- 12. *Profesionālās izglītības likums* (1999). (Vocational Education Law), [online] [15.062011]. Available at <u>http://www.likumi.lv/doc.php?id=20244</u> (In Latvian)
- 13. Senge P. (1990). The Fifth Discipline. New York, Random House.
- 14. Simmie J. (2005). *Innovation, Networks and Learning Regions*. London, Taylor and Francis Group. p. 258.
- 15. *Vispārējās izglītības likums* (2011). (Law on General Education), [online] [15.06.2011]. Aviable at <u>http://www.likumi.lv</u> (In Latvian)

# FAMILY AND CHILDREN EDUCATIONAL OUTCOMES: SOCIAL RESILIENCE WITHIN ECONOMICALLY DEPRIVED FAMILIES IN LATVIA

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**Abstract:** The purpose of this paper is to describe the likelihood of social resilience and its effects among economically deprived families and their children in Latvia. Secondary analysis of semi–structured interviews with respondents from economically deprived, large or single parent families, conducted within the research project supported by the European Social Fund "Causes and duration of unemployment and social exclusion", as well as data analyses from OECD (Organization for Economic Co–operation and Development) Program for International Student Assessment 2006 (PISA 2006) on students educational achievements and factors affecting them, were developed. According to the results of the research, there is high probability that students from economically deprived families, but possessing significant personal and environmental protective factors (human, social and cultural capital), can reach much higher educational achievements than students who share the same socio–economic status, but who don't have these protective factors.

Keywords: social resilience, achievements of economically deprived students, OECD PISA 2006.

## Introduction

In any society family plays a very important role and impact on the children's educational process and outcomes, as well as in the transmission of social status from one generation to another (Buchmann, 2002). By several researchers family is even considered as the most reliable factor who with extremely high accuracy can predict students' performance (Buchmann, 2002). In recent decades impact of family socio–economical background often was one of the main subjects of research studies and a significant proportion of the projects, implemented in recent years in the field of education, confirms that there is a close relationship between family socioeconomic situation and children's educational performance – children from families where parents have high socio–economic status, significantly more likely to be successful in school than those children who come from families with relatively lower socioeconomic status (Steelman, Powell, 1989).

The data shows that over the last three years (2009–2011), the number of economically deprived families in Latvia has increased – in January, 2009, poor person status was determined for 48 680 inhabitants; January, 2010, for 103,093 people and January, 2011, this status was determined for 178,251 people or 8% of the population (Lūse, 2010). While the study "Causes and duration of unemployment and social exclusion" revealed that a large proportion of poor families are living in rural area, almost half of people, who have been granted for poor person status, have children under the age of 18 years, and every tenth family have three or more children (Rungule, et al 2007). According with the above, there is the increasing proportion of students with high risk of academic failure in Latvia.

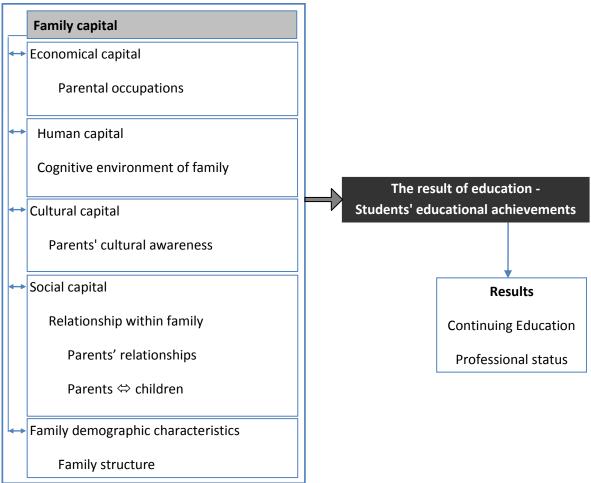
Thus, particularly students from economically deprived families in rural areas have a lot of barriers that impede access to the high–quality basic education comparing their peers in urban area. For rural children it is also problematic to continue their education and after that – to enter the labour market, which, as evidenced by other studies, unfortunately is one of the prerequisites for poverty and social exclusion reproduce in coming generations (Trapenciere, et al, 2000; Trapenciere, 2006). This relationship is also confirmed by the performance of Latvian students' in internationally comparative educational research projects – students' educational achievements are highly different, which is significantly affected by (1) Factor of urbanization – relatively lower in rural areas as in urban areas; (2) Average socio – economical status of school – educational achievements are relatively lower at schools attended by large proportion of students with lower family socio – economical status (Geske, et al, 2007).

However, studies have shown that a certain number of poor students despite of all difficulties and problems caused by the material deprivation are capable to adapt positively at critical situation and to meet the high educational achievements (Rutter, 1990; Werner, Smith, 2011). Those students from disadvantaged families, who are not meeting the negative expectations of low educational achievements, but even get higher educational results than might be predicted based on their family circumstances, in this paper are defined through social resilience paradigm, a construct explaining the maintenance of positive adaptation by individuals despite experiences of significant adversity (Luthar, et al, 2000). Social resilence is two–dimensional construct, which on the one hand is associated with a highly critical situation, on the other – with positive adjustment to it. Competencies and success in school of students from economically deprived families can be identified as positive adaptation and potential of social resilience (Masten, Coatsworth, 1998).

Accordance with the above, *the purpose* of this paper is to describe the likelihood of social resilience and its effects among economically deprived families and their children in Latvia.

## Materials and methods

Theoretical and empirical focus of the paper is oriented to multi-dimensional impact of family factors on educational achievements of students from economically deprived families. In order to explain the family influence on student's achievements, diverse forms of capital conversion process are analyzed by researchers, arguing that performance of the student is not determined only by economical factor, but also several other inter–related processes taking place within the family – transmission of human, cultural and social capital as well as family demographic characteristics (Бурдье, 1993; Coleman, 1988; Meņšikovs, 2009) (Fig. 1).



# Figure 1. Dimensions of family capital as determinants of students' educational achievements

Source: Author's scheme established by adapting Buchmann, Hannum, 2001; Bebriša, et al, 2007.

Consequently, the economically deprived families can convert available to them social, cultural and human capital to compensate the lack of economic capital to contribute for higher educational achievements of children.

Secondary data from following research projects were used:

1. Analysis of semi– structured in–depth interviews (n=35) with respondents from economically deprived families, conducted within the research project supported by the European Social Fund "Causes and duration of unemployment and social exclusion" (Rungule, et al, 2007).

Target group of interviews: the poor persons, representatives from single parent and large families (in most cases – the mother), who have children under the age of 18 years. Interviews were conducted from June to December 2006. Within project "Causes and duration of unemployment and social exclusion" in general were interviewed 200 representatives from several risk groups of social exclusion in order to clarify the subjective opinions of people at risk of social exclusion and adequate profile of manifestations of social exclusion.

Information obtained through interviews gives insight into situation of economically deprived families – their limited opportunities to provide children with the necessary for general education, restrictions related to the lack of financial resources and address the positive changes in the situation – the social flexibility of expression. Within the analyses all respondents' names have been changed to pseudonyms; indicated ages and numbers of children are from the time of recruitment into the study.

2. Secondary data analyses from OECD Program for International Student Assessment 2006 (PISA 2006) on students' educational achievements and factors affecting them.

Database of OECD PISA 2006 is chosen due to the aims and extent of this project. The goal of PISA 2006 is to assess student performance and to collect data on the student, family and school factors for in – depth analyses to explain differences in the performance (OECD, 2010).

Research database is available on PISA homepage <u>http://pisa2006.acer.edu.au/</u>. The initial results of PISA 2006 are described in publications written by the OECD (OECD, 2007) and national research coordinators (Geske, et al, 2007). The process of obtaining data and their structure are described in the PISA 2006 Technical report (OECD, 2009).

The randomly selected sample in PISA 2006 consisted of n=4719 15-years old students in Latvia.

PISA 2006 focused on student's competency in science. Students completed science competence tests and contextual surveys which provides with information on determinants of educational resilience – multidimensional forms of family, school and individual capital.

In order to assess students' social resilience indicators, calculation were made in two stages: (1) educational achievements of students for each country were broken down into three equal groups – low, average and high achievements; (2) index of economic, social and cultural status of students' families (hereafter – ESCS) for each country also was broken down into three equal groups – low, average and high (OECD, 2011). Thus, within research, proportion of resilient students for each country is made of one third of students with relatively lowest ESCS index and with the highest achievements. In comparison, also the non–resilient students were characterized as ones that share the same socio – economic background, but don't have any high educational achievements. This group also was made of one third of students with relatively lowest ESCS index and with lowest achievements.

It should be noted that respondents – representatives of economically deprived families – for qualitative interviews were not invited precisely in accordance with the law regulations (According to the 30/03/2010. MK Regulation No. 299 "Regulations on the family or individual residents' recognition as poor", the family (person) is considered as poor if its average income per family member per month over the last three months not exceed 90 LVL, and if it does not own cash holdings, securities or property), but rather – with a relative understanding of poverty, specified by the well known poverty researcher Peter B. Townsend – poor is everyone who can not afford the goods,

services and activities that meet the community or the community of the commonly prevailing standard (Townsend, 1979).

Since the respondents for interviews were recruited in collaboration with local governments, social services, State Employment Agency, non–governmental organizations representing groups at risk, as well as the so–called "snowball method", it is possible that part of the respondents at the time of interview fully corresponded to a poor person (family) status and received adequate social benefits, however, as already mentioned, this was not the main criterion for selection of respondents. Greater importance was given to contextual information about the respondents' place of residence, family, household material status, etc. (Rungule, et al, 2007).

## **Results and discussion**

## 1. Family capital and social resilience: portrait of economically deprived families in Latvia

Although the Constitution of Latvia and education policy documents set that basic education in country is free, parents are forced to buy books and school supplies for their children, as well as to pay for lunch and transport. Besides, a large part of informal educational activities is available only for fees. Providing children with necessary things required for schooling turns out to be an almost impossible mission for poor families with insufficient financial resources:

- lack of income limits the choices of everyday life it's almost impossible to buy qualitative clothing, shoes, attend cultural events etc; a large part of parents have to refuse their needs for the benefit of children;
- low-income families have to devote a relatively large amount of money for children's educational expenses;
- significant part of educational expenses are related to purchase of materials textbooks and working books;
- school lunch for children from low income families are mostly paid by municipality, others have to spent all day with some bread or sandwich;
- half of the interviewed families as significant problem posed transporting children to school.

Conducted research confirms the fact founded in other studies that low– income families is not a homogenous group (Rungule, et al, 2007). In accordance with the results, the poor families can be divided into two groups – socially resilient families and socially non–resilient families, sharing the same economical background, while family social, cultural and human capital and the ability to convert nonmaterial forms of capital are completely different. Although it's not possible to generalize research results from qualitative data analyses, however, it can be concluded that several of interviewed economically deprived families from Riga, Riga district and large cities do have factors that have positive effect on likelihood of social resilience, while in situation of rural families can be observed a variety of risk factors who limit social resilience. Similarly, social factors positively contributing to the social resilience are parents' higher level, parents' employment and fact that in the family are both parents.

The analysis shows that differences in these two groups and their potential of social resilence are distinguished mainly by two factors, firstly, parental education level as a determinant of human capital, secondly, length of poverty experience.

Socially resilient families are those, where the parents have a higher level of education – secondary vocational or higher education and whose members' incurred recently at the critical economical situation. These families despite of limited financial resources, seeks to buy necessary materials for children, try to improve children's culture and human capital by searching for free opportunities to attend cultural events, like Zaiga, mother of 4, reflects: "Children had very good days at Philharmonic...when there is an opportunity to visit it, to introduce children to the symphonic music, to get to opera without buying expensive tickets. There are possibilities, there are... if you are looking for them, they would come somehow.... I like to look at the poster poles, where there are some kinds of activities... exactly for the soul".

Parents from socially resilient families try to develop positive attitude towards themselves and their family. Velga, who is single mother for her son, told: "if a student or child is internally vital and poverty is not so great, when freezing feet in winter, and child isn't dressed that others show with fingers, then a lot of depends on human nature – as he perceives situations, as he is a vital or not."

Along with other activities computer with an Internet connection recognized as a daily necessity in socially resilient families, therefore in spite of very limited financial resources, the acquisition of it is priority. As told by Selga (40 years, 4 children), "to be honest, we are saving on everything [..] We have 10 lats [LVL] for Internet, children need and also we. [..] We wanted the computer and got. [..] It must be here. Kids had exams at school. All children have a computer lessons at school, everyone wants and everyone already knows computer. Then we bought it, but – on credit, now we will pay for three years by 12 lats [LVL]. Well, we calculated, ok..."

These families have rational plans for children's further education opportunities as well. Typically, parents with higher levels of social and cultural capital emphasize the importance of qualitative education. These parents are aware of significance of "good schools" and trying to ensure that the children are forming their bridging social capital (Briggs, 1998), which will help them to move upwards in vertical mobility and to get away from bonding social capital of poor communities, which only helps them maintain their social status (Narayan, 1999; Putnam, 2000).

Studies have shown that potential of social resilience varies between different individuals and families, and in certain stages of life or in certain area it may be more pronounced, in other – less visible (Henderson, Milstein, 1996). But all socially resilient families are united by desire, capabilities and activities in conversion of nonmaterial forms of family capital.

On opposite, *socially non-resilient families* can be characterized with lower level of mother education (primary or secondary education) and where poverty (and mostly also problematic alcohol use) has inherited at least the second generation. These families are characterized by pessimism in the treatment of themselves and life in general. Many of non-resilient family members think like Rasma, mother of eight: "We are a large family – we are not rich, we are poor – right?! Almost outcast... dropped out from the life. People are not looking to us much... Similarly the children are dividing – oh, you are, you are not so rich as I am – not come with me! It's like that here!"

Contrary socially resilient parents, who are more involved in their children's further education planning and communicate with children on their position, isolation from this issue can be observed in the so-called socially non-resilient families with arguments that they don't want to intervene in their child's future. Thus, Aisma (42 years old, 4 children), who acquired basic education, talking about her daughter future education, said: "I can not read her mind", and talking about other children, believes that "They themselves should decide which education. We say something, they will say – I do not want. They have to learn and think by themselves, whether they will learn or go to work".

Socially non-resilient families are not interested in society and culture life. For example, Silva, mother of 3, reflects, that "In principle… for me I refuse all theaters, cinemas, all sorts of events, and concerts – they are completely eliminated [...] I can not afford at least for now, maybe when they finish school, they will have more autonomy… then maybe.

According to the analysis, social capital – relationships within family, networking with neighbours – is that type a family capital, which belongs to all economically deprived families. Almost any poor family invest something in this capital and get the benefits of that. For many socially non–resilient families social capital is the only one capital owned by them, and although it is limited with very small, bonding networks – only a few friends and neighbours – for many families networking, characterised by reciprocity and provision of trust, is critically important for their existence, first of all in the days, when feeding of children is threatened because of insufficient finances (Dominguez, Watkins, 2003).

Consequently, an opportunity of individuals to fulfil their goals increases with the active interchange of different forms of family capital (Bourdieu, 1986; Meņšikovs, 2008), while the completely opposite relationship developing when the number of risk factors expands. Researcher Joe Sparks, referring to the results of research, notes that children from families who is affected by multi–dimensional economic, social and cultural deprivation risk, has a very high potential of educational failure (Sparks, 1999).

The data show that among the factors that adversely affect students' achievements is very strong likelihood of interaction, and the cumulative effect of risk can be even more pronounced than the simple sum of individual factors.

The researchers argue that effects of family socio–economic status realizes through process of socialization, through the experiences in family environment. Achievements in school and behaviour are linked with family socioeconomic status and, as shown by recent research project, multi–problem children come from multi–problem families, which are characterized by economical, social and psychological deprivation (McCulloch, et al, 2000).

On opposite, if family is able to compensate negative impact of limited financial resources on various areas of life with other forms of nonmaterial capital and to give this experience to the next generation, there is a strong probability that from socially resilient families come educationally resilient children who are able to cope with the problems of family economical deprivation and get high educational achievements. The proportion of both groups of students is characterized in next chapter.

## 2. Students' achievements in OECD PISA 2006 and the presumption of social resilience

Average achievement in science within OECD PISA 2006 of Latvian 15–year–old students is 490 points (28th best score of 57 participating countries), which is slightly below the OECD average (10 points difference is statistically significant) (Geske, et al, 2007).

It can be concluded that OECD PISA 2006 data confirm the theoretical framework and the above empirical studies on correlation between family socio–economic status and student performance – the group of students with higher index of economic, social and cultural status of students' families (ESCS) get higher score – 521 points, than group with the lowest ESCS, who received relatively only 462 points (Table 1).

At the same time, research results also clarify assumption, that there is proportion of students who in spite of all difficulties and problems, caused by the material deprivation in family, are able to adapt positively to critical situation and reach high educational achievements.

According to the OECD PISA 2006 data, measured by the methodology piloted in this study, 7,4% of all Latvian students can be considered to be educationally resilient – students who come from poor families, but able to obtain high educational performance. Unfortunately, the students who are unable to cope with a negative impact of critical financial situation in family on their education, as evidenced by cognitive test results, are twice as many – 15,6%.

Table 1

	Student achievements in science, PISA 2006						
		The lowest		Average		The highest	
		achievements				achievements	
		Students,	Test score	Students,	Test score	Students,	Test score
		%		%		%	
ESCS	The lowest	15,6%	395	10,3%	489	7,4%	567
index	Average	11,1%	404	12,4%	492	9,9%	574
	The highest	6,3%	407	10,7%	494	16,3%	584

Educational achievements of students in PISA 2006 in different groups of ESCS index

Source: Author's calculations, using OECD PISA 2006 data.

An analysis of data collected on students' achievement shows that the Latvian educationally resilient students gained 567 points. This number is equivalent to average score of students in Finland, country with the highest average rate from all 57 participating countries.

While performance of educationally non-resilient students – low achievers from economically deprived families (395 points) is significantly lower than the average at OECD PISA 2006 and at the same level as student achievements in Bulgaria and Romania – states with the lowest average results in Europe (Geske, et al, 2007; OECD, 2007).

## Conclusions

- Analysis of OECD PISA 2006 on Latvian students' achievements confirms the findings from theoretical literature, that there are number of students from economically deprived families who despite of negative expectations on their educational performance are able to reach high educational achievements. Research data shows that approximately 7% of all 15-years old students in Latvia are considered as so-called resilient students.
- Although, the twice (15,6%) is number of socially non-resilient students from families sharing the same socio–economical background who confirmed predictions related with their educational achievements and get very low achievements in the OECD PISA 2006.
- Information from qualitative interviews with representatives of poor families indicates that there is high probability that students from families with low socio-economic status, but possessing significant personal and environmental protective factors (non-material capital), can reach much higher educational achievements than those students who share the same socio-economic status, but who don't have these protective factors.
- Thus, in the frame of the research, economically deprived families can be divided into two groups socially resilient families and socially non-resilient families, with similar economical background, but with completely different family social, cultural and human capital and the ability to convert it. The analysis shows that differences in these two groups and their potential of social resilence are distinguished mainly by two factors, firstly, parental education level as a determinant of human capital, secondly, length of poverty experience.
- Accordance with the above, in the future studies on factors affecting achievements of students from economically deprived families more attention will be paid to the quantitative measurements of school determinants aspects which eventually can compensate the consequences of critical financial situation on students' performance.

## References

- 1. Bebriša I., Ieviņa I., Krastiņa L. (2007). *Skolēnu atbiršana pamatskolās. Problēmas risinājumi*. (Students' dropouts in primary schools. Problem solutions) Rīga, BSZI. (In Latvian)
- 2. Bourdieu P. (1986). The forms of capital. In J. Richardson (Ed.) *Handbook of Theory and Research for the Sociology of Education*. New York, Greenwood, p 241-258.
- Buchmann C. (2002). Measuring Family Background in International Studies of Education: Conceptual Issues and Methodological Challenges. In Porter A.C., Gamoran A. (ed.) *Methodological Advances in Cross-National Surveys of Educational Achievement*. Washington, DC, National Academy Press, p 150-197.
- 4. Buchmann C., Hannum E. (2001). Education and stratification in developing countries: A review of theories and research. *Annual Review of Sociology*, Vol. 27, p 77-102.
- 5. Briggs X. (1998). Brown kids in white suburbs: Housing mobility and the many faces of social capital. *Housing Policy Debate*, Vol. 9, p 177-221.
- 6. Coleman J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94 (Suppl.), p 95-120.
- Dominguez S., Watkins C. (2003). Creating Networks for Survival and Mobility: Social Capital among African–American and Latin-American Low-Income Mothers. *Social problems*, Vol. 50, No. 1, pp. 111-135.
- Geske A., Grinfelds A., Kangro A., Kiseļova R. (2007). Kompetence dabaszinātnēs, matemātikā, lasīšanā – ieguldījums nākotnei. Latvija OECD valstu Starptautiskajā skolēnu novērtēšanas programmā 2006. (Competences in science, mathematics, reading – investment in the future. Latvia within OECD International Student Assessment Program 2006) Rīga, SIA Drukātava. (In Latvian)
- 9. Henderson N., Milstein, M. (1996). *Resiliency in schools: Making it happen for students and educators*. Thousand Oaks, CA, Corwin Press.

- Lūse L. (2010). Plāno būtiski atvieglot trūcīgā statusa iegūšanu (Intends to facilitate the acquisition of poor person status). *Latvijas Vēstnesis*, 10.02.2010. [online] [15.03.2011]. Available at http://lv.lv/?menu=doc&id=204956 (In Latvian)
- 11. Luthar S., Cicchetti D., Becker B. (2000). The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work. *Child Development*, Vol. 71, p 543-562.
- 12. Masten A.S., Coatsworth J.D. (1998). The development of competence favorable and unfavorable environments. *American Psychologist*, Vol. 53, p 205-220
- 13. Marjoribanks K. (2002). *Family and school capital: towards a context theory of students' school outcomes.* The Netherlands, Kluwer Academic Publishers.
- 14. McCulloch A., Wiggins D., Joshi H., Sachdev D. (2000). Internalizing and Externalizing Children's Behavior Problems in Britain and the US: relationships to family resources. *Children and Society*, 14(5), p 368–383
- 15. Meņšikovs V. (2009). Kopkapitāls un jaunatnes dzīves stratēģijas: socioloģiskais aspekts. (Total Capital and Youth Life Strategies: Sociological Aspect) Sociālo zinātņu vēstnesis. Vol. 2, p. 8–36 [online] [10.11.2011]. Available at http://petnieciba.lv/materiali/publik/2009\_Kopkapitals\_un\_jaunatnes\_dzives\_strategijas.p df (In Latvian)
- 16. Narayan D. (1999). Bonds and Bridges: Social Capital And Poverty. World Bank Poverty Grou, 07/1999 [online] [06.05.2011]. Available at http://info.worldbank.org/etools/docs/library/9747/narayan.pdf
- 17. OECD (2007). PISA 2006: Science Competencies for Tomorrow's World, OECD, Paris.
- 18. OECD (2009). *PISA 2006 Technical Report*. OECD. [online] [12.11.2011]. Available at http://www.oecd.org/dataoecd/0/47/42025182.pdf
- 19. OECD (2010). *PISA 2009 Results: Overcoming Social Background Equity in Learning Opportunities and Outcomes* (Volume II) [online] [12.11.2011]. Available at http://dx.doi.org/10.1787/9789264091504–en
- 20. OECD (2011). Against the Odds: Disadvantaged Students Who Succeed in School, OECD Publishing.
- 21. Putnam R. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York, Simon & Schuster.
- 22. Rungule R. (ed.) (2007). *Causes and duration of unemployment and social exclusion*. Rīga, LU FSI, BICEPS, Socioloģisko pētījumu institūts. [online] [20.11.2011]. Available at http://www.lm.gov.lv/upload/darba\_tirgus/darba\_tirgus/petijumi/12\_pet\_en.pdf
- Rutter M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A. S. Masten, D. Cicchetti, K. H. Nuechterlein, S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology*. Cambridge, UK, Cambridge University Press, p 181–214.
- 24. Sparkes J. (1999). *Schools, Education and Social Exclusion*. London, Centre for Analysis of Social Exclusion, London School of Economics.
- 25. Steelman L. C., Powell, B. (1989). Acquiring capital for college: The constraints of family configuration. *American Sociological Review*, 54, p 844-855.
- 26. Townsend P. (1979). Poverty in the United Kingdom: a survey of household resources and standards of living. Great Britain, University of California Press.
- 27. Trapenciere I., Rungule R., Pranka M., Lāce T., Dudwick N. (2000). *Nabadzīgo cilvēku viedokļi nabadzības sociālais vērtējums Latvijā*. (Poor people's opinions social assessment of poverty in Latvia) Rīga: Labklājības ministrija & UNDP. (In Latvian)
- Trapenciere I. (2006). Es rullēju, tu rullē. Vai viņš/viņa rullē? Cool...: Par jauniešu dzīves kvalitāti. (The young people's quality of life) In: Bela B., Tisenkopfs T. (red.). *Dzīves kvalitāte Latvijā* (Quality of life in Latvia). Rīga, Zinātne, 110–152 lpp. [online] [08.08.2009]. Available at <a href="http://www.president.lv/images/modules/items/PDF/item\_1124\_Dzives\_kvalitaate\_Latvij">http://www.president.lv/images/modules/items/PDF/item\_1124\_Dzives\_kvalitaate\_Latvij</a> a.pdf (In Latvian)
- 29. Werner E., Smith R. (2001). Journeys from childhood to midlife: Risk, resilience, and recovery. Ithaca, NY,Cornell University Press.

# ECOLOGICAL APPROACH IN NURSE EDUCATION

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**Abstract:** Education for sustainable development is the main tendency of a nurse education in the twenty first century. Complementary including ecological knowledge, skills and competence in nurses' education it is possible to create a new approach to the process of nurse's education and practice of patients care accordingly to the educational viewpoints of the twenty first century, as well as realize a holistic care. An ecological approach in the completed research on nurse's education and practice is theoretically grounded on U. Bronfenbrenners (1917 – 2005) created ecology of human development. Author's developed and approbated study course within the framework of research has improved knowledge and understanding of nurses on ecological approach in patients' care.

**Keywords:** nurse's education, an ecological approach.

## Introduction

The actuality and necessity of developed study course of "Ecological approach in patients' care" is determined by the main tendency of the twenty first century – *education for a sustainable development*. The development of study programs in Latvia is conformity with UNESCO strategy of Education for Sustainable Development (UNESCO, 2011) and *European Qualifications Framework* (EQF) and Latvian Qualifications Framework (LQF), in which the professional education of nurse meets the fifth level. Frameworks define learning results: knowledge, skills and competence. The aim of author's research is to include complementary also ecological knowledge, skills and competence in nurses' education, to realize an ecological approach in patients' care. Such trend is based on the development of history of nursing theories and researches of educational ecology.

One of the main nurses' practice tasks is to develop a safe and favorable care environment in patient's care. Already Florence Nightingale (1820-1910), a world-famous nurse, emphasized the important environmental influence on human health, "...external conditions and influences that affect life and development" (Whall, Shin, Colling, 1999).

Analyzing theories/models of nursing or care, it was recognized, that F. Nightingale's viewpoint on the *environmental importance* in patients' care nowadays, is emphasized in works of several authors (Newman, 1992; Palmer, 1997; Stanley, 2007; Sparacino, 1994; Alligood, 2002).

Patient and *environmental interaction* in nursing are defined in nursing theories and models (Hall, 1996; Henderson, 1980; Jonson, 1980; King, 1981; Leininger, 1985; Levine, 1973; Neuman, 1996; Newman, 1997; Orem, 1980; Orlando, 1990; Parse, 1981; Peplau, 1997; Rogers, 1990; Roy, 1989; Travelbee, 1971; Paterson, Zderad, 1976).

In the twenty first century patients' care and environment are rapidly evolving, equipped with sophisticated technologies and new generation drugs, however, the main concepts patient – health – care – environment are not changed. The Betty Neuman health care systems model, which is developed by the nurse theoretician Dr. Betty Neuman from United States of America in 1974, at present is ranked as one of the leading theories in nurses' education and practice. The model was developed for nursing studies to create and holistic understanding of concepts of a *human*, *environment*, *health*, *care* in the aspect of physiology, psychology, socio-culture and human development, defining the environment, "...those forces that surround humans at any given point in time; may be internal, external, or created" (George, 2010).

Educational ecology research started on the basis of U. Bronfenbrenner's ecology of human development (Bronfenbrenner, Morris, 1998; Bronfenbrenner, 2005). The research of educational ecology and also research of competence have been accomplished also in the Faculty of Engineering Institute of Education and Home Economics Latvian University of Agriculture. The results of studies are reflected in more than hundred publications, including monographic series of *Educational ecology* in five former editions (Katane, Pēks, 2006; Katane, 2007a, 2007b; Alondere, Pēks, Renigere, 2008; Briede, Pēks, 2011).

Educational ecology and studies of problems related to the development of sustainable education are accomplished in several doctors' dissertations abroad (Hirsto, 2001; Turpeinen, 2005) and in Latvia (Katane, 2005; Grabovska, 2006; Roga, 2008). Stephen Sterling doctor's dissertation (Sterling, 2005) and monograph Sustainable Education Re-visioning Learning and Change (Sterling, 2001) can be noted as important examples of sustainable education research publications. There are created scientific institutions, which manage researches of educational ecology, for example, *Institute for Research on Educational Ecology* (2006).

Finnish scientist Väinö Turpeinen explains the educational ecology as an interdisciplinary scientific approach appropriate to postmodernism and constructivism, which is characterized with holistic and heuristic thinking, interactive learning in formal and informal education (Turpeinen, 2005). Such approach is necessary also in the medical care, where patients and their relatives, as well as whole society informal education are important part of it within care and preventive activities framework. The realization of such education is a significant component of nurse's work.

The completed research actualizes a discussion about the introducing of educational ecology in nurses' education in order to realize the ecological approach in patients care in a holistic perspective. The aim of nurse study course "*Ecological approach in patients' care*" is to get knowledge and skills, as well as develop a competence to realize an ecological and holistic approach in patients' care, as well as realize the professional completion and the informal education of patients on the bases of an educational ecology. In the aspect of ecological approach the development of viable personality in the environment is very important when create the quality of life. Three components: the ability to adapt in a rapidly changing environment, develop oneself with the sense of life and determine oneself in modern aspect (PEIJECKAR, 2009). Education for sustainable development promotes such development.

The developed and approbated study course "Ecological approach in patients' care" is based on an ecological paradigm, human paradigm in education and nursing, as well as complementary principle, which provides a balance between anthropocentric and eco-centric approach (Briede, Katane, Pēks, 2005; Pauli from Siliņš 1994.). A complementary approach does not eliminate also the ability of science and religion to complement each other and such approach is significant to nurse patients holistically in a multicultural society and palliative patient's care.

## Materials and methods

*Respondents of the research:* 49 second year students of the Latvia University Medical College program of "Nursing" and "Medicine", which mastered a course "Ecological Approach in Patients' Care" in the first semester of 2011/2012 academic year.

Grouping of respondents by the place of residence: 38 students from the Latvian cities, counties, such as Ergli, Dagda, Naukseni, Sala County – Selija parish, Varaklani, etc. and 11 students from Riga.

*The studies method.* The questionnaire was developed to clarify students' opinion on the concepts of the medical ecology and the educational ecology, and the questionnaire was made before and after the study course "Ecological Approach in Patients' Care". 49 students responded to the questions before the study course "Ecological Approach in Patients' Care" and 47 students after this course. Respondents could choose one or several versions of the given answers in the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> question. They had to choose one of the given answers in the 4<sup>th</sup> question (Table 1.).

Before the study course 45 respondents textually expressed their opinion on the necessary ecological competence for the nurse, after the study course -46 respondents. Findings are reflected in the Table 2.

To process answers the content-analyses of the content of answers was made (Kroplijs, Rasčevska, 2004).

## **Results and discussion**

**Before** the study course 100% of students related the concept of *ecology* with the maintenance of environment and nature. Majority - 78% have not heard the concept of *educational ecology*, only 8% of respondents faced this phrase while reading publications. 50% respondents have never heard the concept of *medical ecology*, 17% have heard during nursing studies, 14% have read in publications on education or medicine. The results of questionnaire indicate that concepts of *educational ecology* and *medical ecology* have been obscure to students. At present the participants of research relate the concept of *medical ecology* with environment and environmental protection, with baneful influence of environmental factors, as well as an interaction in the care process of patient – medical staff – close relatives 95%, only 6% with environmental pollution.

Table 1

Questions and possible answers		Before the course		After the course	
			Number	%	
Number of respondents, <i>n</i>	49	100	47	100	
1. The concept of <i>ecology</i> in my previous experience is used in connect	tion with				
an environmental protection, the maintenance of biological objects, a wise use of natural resources	49	100	37	79	
an interaction of patient, his close relative and medical staff in care process	-	-	36	77	
interaction of pupils and students and an interaction with the staff of educational institution	-	-	14	30	
2. Till now a phrase <i>educational ecology</i>	•				
have never heard or read	38	78	6	13	
have heard within conferences or seminars of medicinal	1	2	3	6	
have heard when studied nursing	4	8	32	68	
have read in the publications about education or medicine	4	8	11	23	
have heard or read somewhere	2	4	4	9	
3. Till now a phrase <i>medical ecology</i> :					
I have never heard or read	29	50	3	6	
have heard within conferences or seminars of medicinal	3	6	3	6	
have heard when studied nursing	8	17	33	70	
have read in the publications about education or medicine	7	14	8	17	
have heard or read somewhere else	2	4	6	13	
4. I think <i>a medical ecology</i> is connected					
only with environmental protection from pollution, the protection of patients and medical staff from a baneful influence of environmental factors	3	6	-	-	
with an environmental protection from pollution, protection of patients and medical staff from a baneful influence of environmental factors, as well as the interaction of patient, his close relatives and medical staff in the care process	47	95	47	100	

## Medical college students' understanding of the concept ecology

*After* the study course 79% of students relate the concept of *ecology* with environment, 77% with the interaction of a patient, close relative and medical staff in care process, and 33% of students and educators interaction in study process. 68% of students relate the concept of *educational ecology* with nursing studies, although 6 students, that is, 13% have not heard or read about it that can be because of missed lectures or studies. 70% of students relate the phrase *medical ecology* with nursing studies, as well as read publications on medical ecology. 100% of students relate *medical ecology* with the pollution of environment and a protection of patients and medical staff against unhealthy influence of

environmental factors, as well as the interaction of patient, close relative and medical staff within care process.

The notion of the medical college students on the concept's *medical ecology and educational ecology* study results compared to and analyzed with the studies, which the author has been carried out in cooperation with research student Dace Veikina within the master's paper "Development of education of medical nurses", as well as within the questionnaire for Riga Medical college further education course participants of the University of Latvia. In these studies the answers to the questions on the *medical ecology and educational ecology* provided 125 medical nurses with seniority of 5 to 39 years, who acquired over-qualification course *The Nurse – Physician's assistant*, and 64 medical nurses with seniority of 5 to 10 years, who took part in the RMC further educational course of the University of Latvia. The aforementioned respondents did not take part in the study course "Ecological approach to patient's care".

Table 2

Abbreviations	Concepts	Before the course		After the course	
		Number	%	Number	%
EPEn	Environmental protection, answers conform with the concept of <i>environment</i>	11	24	2	4
EPEd	<b>Educational process</b> answers conform with the concept of <i>education</i>	2	4	-	-
PS	<b>Professional skills'</b> answers conform with the concept of <i>skills</i>	8	18	2	4
РС	<b>Professional competence</b> answers conform with the concept of <i>competence</i>	2	4	3	7
НС	Holistic care answers conform with the concept of <i>ecological approach</i>	4	9	10	22
EPEn, EPEd, PS, PC or HC	Answers, which can be referred to several categories simultaneously	10	22	25	54
AC	<b>Answers</b> do not <b>conform</b> with the nature of question	8	18	4	9
Total number of given answers		45	100	46	100

The answers of both respondents on the concept *ecology* are related to the surrounding environmental protection. The phrase *educational ecology* many of the respondents have not heard before, only a little number of respondents has read some publication or heard in the further educational courses, conferences or workshops for medical officials, or have read some publications on the education or medicine. The acquired results are similar to results, which were described in the previous study.

## Conclusion

- 1. Evaluating the development of studies of nursing theories and educational ecology, it was established, that learning of ecological knowledge, skills and competence are preferable to include in the nursing education. One of the possibilities to master them is the study course "Ecological approach in patients' care", which is approbated in several medical education programs.
- 2. In formal and informal educational programs for nurses of studious habits and for nurses, who participated in the inquiry, the concept *medical ecology and educational ecology* up till now was quite little known. It mainly was related to environmental pollution and protection of patients and medical officials against destructive impact of environmental factors. Only 17% of the respondents met with this concept *medical ecology* in the nursing studies in formal

education, but 14% in informal education. Till now the acquired formal education of nurses has little succeeded in ecological approach in caring and caring of holistic patients, as well as in sustainable development of education.

- 3. Within the study the course developed and approbated by the authors has supplemented knowledge and sense of nurses on the ecological approach to patients' caring. All the course listeners related that with both surrounding environmental protection from pollution and protection of patients and medical officials from destructive impact of environmental factors, as well as with an interaction of patient and his relatives and medical personnel in the process of caring.
- 4. The notion of ecological competency of the nurse is insufficient and it is necessary to continue with the studies on the model of ecological competency of the nurses and its usage in educational program development and implementation for medical nurses, as well as improvement of medical care. It is necessary to update the holistic approach in acquisition studies and it implementation in the caring.

## References

- 1. Alondere L., Pēks L., Renigere R. (2008). *Māsa un pacients ekoloģiskajā skatījumā: izglītība un aprūpe* (Nurse and patient in the ecological view: education and nursing). Jelgava, Latvia University of Agriculture, Institute of Education and Home Economics, 51 p. Monographic research series Ecology of Education. CD-ROM (In Latvian)
- Briede B., Pēks L. (2011). *Ecological Approach in Education* [electronic resource]. Jelgava, Latvia University of Agriculture, Institute of Education and Home Economics, 160 p. Monographic research series Ecology of Education. CD-ROM. ISBN 9789984480473. (In Latvian)
- 3. Bronfenbrenner U., Morris P.A. (1998). *The Ecology of Developmental Processes*. In: *The handbook of child psychology. Vol.1 Theoretical models of human development*, 5th ed. John Willey & Sons, New –York, pp. 993-1028.
- 4. Bronfenbrenner U. (2005). (ed.) *Making Human Beings Human: Bioecological Perspectives on Human Development* Sage Publications: Thousand Oaks, CA.
- 5. George J.B. (2010). *Nursing Theories: The Base for Professional Nursing Practice*, 6th ed. Department of Nursing California State University, Fullerton CA, pp. 685.
- Grabovska R. Implementation of the principle of sustainability in teacher education. PhD thesis for Scientific Degree of Dr. paed. Daugavpils University, Daugavpils 2006. Summary, [online] [07.01.2012]. Available at
- http://www3.acadlib.lv/greydoc/grabovskas\_disertacija/grabovska\_lat.doc (In Latvian) 7. Hall L.E. (1966). *Another view of nursing care and quality*. In: K.M. Straub, K.S. Parker (Eds.),
- Continuity in patient care: the role of nursing. Catolic University Press Washington, DC
- 8. Henderson V. (1980). The nature of nursing. New York, Macmillan, p. 285.
- 9. Johnson D.E. (1980). *The behavioural system model for nursing*. In: J. P. Riehl, C. Roy (Eds.), Conceptual models for nursing practice (2nd) AppletonCentury- Crofts, New York, pp. 207-216.
- 10. Katane I. (2005). The Evaluation Model of the Rural School as Educational Environment. Doctoral Dissertation for Scientific Degree of Dr. paed. Daugavpils University, Daugavpils. Summary (Word 2000 format), [online] [06.01.2012]. Available at <u>http://www3.acadlib.lv/greydoc/katanes\_disertacija/katane\_ang.doc</u> (In Latvian)
- 11.Katane I., Pēks L. (2006). Izglītības ekoloģija: starpdisciplinārs virziens izglītības pētniecībā. (Education of ecology: interdisciplinary trend in the education research) Jelgava, Latvia University of Agriculture, Institute of Education and Home Economics, 56 p. Monographic research series Ecology of Education. CD-ROM. (In Latvian)
- 12. Katane I. (2007a). Paradigmas Latvijas izglītības vidē mūsdienās. (Paradigms in Latvian education environment nowadays) [electronic resource]. Jelgava, Latvia University of Agriculture, Institute of Education and Home Economics, 117 p. Monographic research series Ecology of Education. CD-ROM (In Latvian)
- 13.Katane I. (2007b). No ekoloģiskās paradigmas līdz vides modelim izglītības pētniecībā (From ecological paradigm to environmental model in the education researche) [electronic resource]. Jelgava, Latvia University of Agriculture, Institute of Education and Home Economics, 239 p. Monographic research series Ecology of Education. CD-ROM. (In Latvian)
- 14. King I.M. (1981). A theory for nursing: System, concepts, process. New York, Wiley, p. 243.

- 15.Kroplijs A., Raščevska M. (2004). Kvalitatīvās pētniecības metodes sociālajās zinātnēs. (Qualitative research methods for the social sciences). Rīga, SIA"Izdevniecība RaKa", 178 lpp. (In Latvian)
- 16.Leininger M.M., Mc Farland M.R. (2006). *Culture Care Diversity and Universality*: A worldwide nursing theory (2nd Ed.) Boston, Jones and Bartlett, pp. 209 212.
- 17.Levine M. E. (1989). *The conservation principles: Twenty years later*. In.J. Riehl- Sisca (Ed). *Conceptual models for nursing practice* (3rd Ed.) Norwalk, CT, Appleton & Lange pp. 325 337.
- 18. Neuman B. (1996). *The Neuman Systems Model in research and practice*. Nursing Science *Quarterly*, 9. pp. 67-70.
- 19. Neuman B. (2010). The Neuman Systems Model (3nd ed) Norwalk, CT Appleton & Lange p 732.
- 20.Newman M.A. (1997). *Evolution of the theory of health as expanding consciousness*. Nursing Science *Quarterly*, 10, pp. 22 25.
- 21.Newman M.A. (1992). *Nightingale's vision of nursing theory and health*. In F. Nightingale, *Notes on nursing: What it is and what it is not* (Com. Ed) Philadelphia, Lippincott pp. 44 47.
- 22.Orem D.E. (1980). Nursing: Concepts of practice (2nd ed) New York, McGraw-Hill, p. 330.
- 23.Orlando I.J. (1990). *The dynamic nurse patient relationship: Function, process, and principles.* New York, National League for Nursing, p. 386.
- 24.Parse R.R. (1987). *Man-living- health: A theory for nursing*. In J.P. Riehl Sisca (Ed.), *Conceptual models for nursing practice*, 3<sup>rd</sup> ed. Norwalk, CT Appleton & Lange, pp. 253 257.
- 25.Paterson J. G., Zderad L. (1971). All together thorough complementary syntheses the worlds of the many. Journal of Nursing Scholarship, 4(3) pp. 13 -16.
- 26.Peplau H. E. (1997). *Peplau's theory of interpersonal relations*. Nursing Science *Quartely*, 10, pp. 162 167.
- 27.Roga V. (2008). Sociālā pedagoga ekoloģiskās kompetences veidošanās lauku kopienā [Establishing the ecological competence of social pedagogues in rural community (dissertation)]. Latvijas Universitāte, Rīga. [online] [06.11.2011]. Available at ttp://luis.lanet.lv/pls/pub/luj.fprnt?l=1&fn=F75892/Vita%20Roga%202008.pdf (In Latvian)
- 28.Rogers M. E. (1990). Nursing: A science of unitary, irreducible human beings. In E.A. M.Barett(Ed.), Visions of Roger's science based nursing. New York, National League for Nursing p 5-11.
- 29. Roy C. (1989). The Roy Adaptation Model. In Riehl Sisca (Ed.), *Conceptual models for nursing practice* 3rd ed.. Norwalk, CT: Appleton & Lange p 105 114.
- 30. Siliņš E.I. (1999). *Lielo patiesību meklējumi*. [Search for the Great Truths] Rīga, Apgāda "Jumava" 509 lpp. (In Latvian)
- 31.Sparacino P.S.A. (1994). Florence Nightingale: A CNS role model. Clinical Nurse Specialist, 8(2), p. 64.
- 32. Stanley D. (2007). *Lights in Shadows: Florence Nightingale: Selected letters*. Contemporary Nurse, 24. pp. 45-51.
- 33.Sterling S. (2005). Whole Systems Thinking as a Basis for Paradigm Change in Education: Explorations in the Context of Sustainability. University of Bath Bath. [online] [06.11.2011]. Available at <u>http://www.bath.ac.uk/cree/sterling/sterlingthesis.pdf</u>
- 34. Travelbee J. (1971). Interpersonal aspects of nursing, 2nd ed. Philadelphia, F.A. Davis.
- 35. Turpeinen V. (2005). *The Ecology of Learning Sustainable Education*. Acta Electronica Universitatis Tamperensis; p. 410, [online] [06.11.2011]. Available at http://acta.uta.fi/english/teos.php?id=10715
- 36. Whall A.L., Shin Y. H., Colling K. B. (1999). A Nightingale-model based for dementia care and its relevance for Korean nursing. Nursing Science Quartely, 12, pp. 319-323
- 37.UNESCO (2011). Characteristics of ESD. [online] [06.11.2011]. Available at <u>http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/education-for-sustainable-development/characteristics-of-esd/</u>
- 38.Рыльская Е.А. (2009). Психология жизниспособности человека (Psychology of human vital capacity): монография. Изд во ЧГПУ, Челябинск, 361 с. (In Russian)

# PROBLEM-BASED EDUCATION PROCESS MODELLING AT THE LESSONS OF HISTORY OF LATVIA AT SECONDARY SCHOOL

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**Abstract:** The problem-based learning is based on the student historic self-experience and the skill to update their experience. The history teaching for the teacher, the history learning for the students turns into collaboration at the lessons, where obviously up-bringing and self-upbringing processes also take place. The use of the problem-based learning or exteriorization is especially significant. Due to implementation of the problem-based learning method the greatest gain is that the student thinking changes. The peculiar conditions created during the lessons, where the student on the basis of his already gained knowledge, autonomously discovers and perceives the offered or arisen educational problem. Then they by thinking and action search and substantiate the most optimal variants for the solution of the problem. During the procedures in the lessons based on the educational problem and action theory, the student autonomous part of the cognition increases significantly. By solving the problem situations, the intensity of their thinking is reinforced for search of new knowledge and new approaches to solving of the tasks.

Keywords: problem-based learning, modelling, history of Latvia.

## Introduction

During the time period from 1980, when the author started teaching in Jelgava Secondary School No 4, up to the present in Latvia's schools, learners, teachers, teaching methods, curriculum contents have undergone many changes, which were dictated by the socio-economic and political system change in the state. The human voluntary activity is characteristic for the developed democratic society. Learners' voluntary, autonomous and responsible learning of history, incl. History of Latvia, is one of the most crucial criteria, when as indexes serve question forwarding during the lessons and also the answers to the problem-based questions. Nowadays History is a subject, where the learners do not memorize the historical facts by heart, but acquire skill, based on history conceptions and facts, to explain these conceptions and facts by demonstration of comprehension on the historical events. These are significant criteria with the following indexes - skill as ability without restraint considers problems using as a base historical facts, knowledge. During the learning process the learners' socialization evolves more successfully, if the learners develop their habit of sharing knowledge and skills, which are acquired in history learning process. The author's pedagogical work experience reveals that the learner's work in history acquiring is always connected with positive achievement experiences. At school there are also the indifferent learners, who demand exceptional teacher performance activity to solve this problem. The habit and opportunity to share their experiences in lessons promote the learners' personality intellectual, emotional and volitional balanced development. Emotional experience gained during the learning process is a significant motif in history acquisition for learners. The author's experience reveals that in real life some of the initially indifferent pupils have turned into excited historians.

Problem-based teaching/learning as a method stimulates the learners to systematic training of their skill to use the acquired knowledge for non-standard situations in the teaching/learning process. If the use of knowledge in teaching/learning process grows into a habit, the learner gains a useful feature for the life-long activity – a skill to actualize and use also earlier and in other subjects acquired knowledge and skills, i.e., rely on their self-experience and to further enrich it. Problem-based teaching/learning method use in education process in secondary school history lessons in Latvia is not a widespread method. The aim of the article is to reveal the author's conceptions gained by the result of pedagogical experience analysis on the problem-based teaching/learning process modelling in history teaching/learning process at secondary classes.

## Materials and Methods

By the article the author publishes the results of the accomplished researches. The author has accomplished both theoretical and empiric researches, namely, pedagogic observations in secondary schools since 1980 and the scientific research since 2000, when the development of the promotional work "Personality and society development correlation research in problem-based History of Latvia teaching/learning classes" was begun.

The aim of the described research in this article was to reveal the use of the developed model of problem-based method in the teaching/learning process at History of Latvia classes in secondary schools.

The author publicizes the results of his research, which are gained by implementation of the following research methods: analysis and evaluation of pedagogical literature; pedagogical observation; self-experience reflection, analyses of pedagogical case studies and biographical method; surveying (questionnaire).

The research author has accomplished analysis and evaluation of scientific literature sources, including studies of the following:

- John Dewey's (Dewey, 1916) idea about the pupils' creative activity development by help of the formulation and activation of problem-based tasks;
- the theory of problem-based method developed by such researchers as Vincent Okon (Оконь, 1968) and Murza Mahmutov (Mahmutov, 1977);
- the learner upbringing researchers' works by Вголізlava Вітіпаз (Битинас, 1984), Ausma Špona (Špona, 2006);
- the conceptions on the learner development in educational and learning processes developed by psychologist Dmitry Leontjev (Леонтев, 2007).

During the research period there were not found any cases of problem-based method implementation in History of Latvia classes' process in Latvia's secondary schools. There can be found discussions on the curriculum contents, e.g., by Maira Spudiņa (Spudiņa, 2003) in pedagogical literature. A wide range of research can be found at transnational level, some cases are mentioned in the article. Sources on use of problem-based education method in the USA (Saye, Kohlmeier, Brush, Maddox, Howel, 2008) and about the problems arising from its implementation in the UK (Wood, 1998) were explored.

The student surveys were carried out during the pedagogic practice periods in Jelgava Secondary School No 1, Jelgava Secondary School No 4, Jelgava Spīdola's Grammar School, Olaine Secondary School No 2 from 1995 till 2003 (487 respondent questionnaires received). Their contents' analyses, the derived results proved the assumption that during processes of social changes by changing the teacher and student collaboration at school, from the dominating teaching and learning model in soviet times to the collaboration model has facilitated the learners' interest awakening in history, the learners appreciated positively the knowledge acquired in the teacher. The learners appreciated positively the problem-based education method introduction into history acquisition process both in History of Latvia and world history subjects. In 2012 by surveying of 230 former students, it was established that they appreciated positively those gains during the education process, which facilitated the adolescent personality development during the school years and were purposeful for further development after school graduation in.

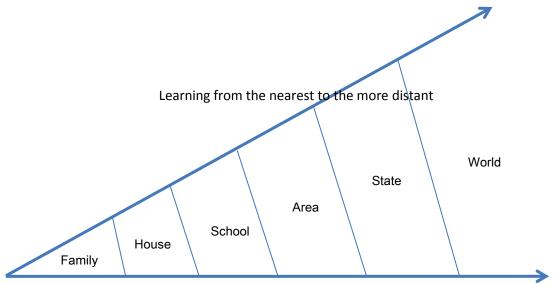
## **Results and Discussion**

The author has 30 years of experience in teaching of History of Latvia. The article offers an insight into the organisation of history classes by use of problem-based methods, which has been developed after 1991, when Latvia regained its independence as a state. The research in the problem-based teaching/learning method was started at the time, when an idea to introduce the subject "Jelgava regional history" (Tomašūns, 1993) in Jelgava Spīdola's Grammar School. While the author was working in Jelgava for Jelgava Spīdola's Grammar School, Jelgava Secondary School No 4, Jelgava Secondary School No 1and Olaine Secondary School No 2, where the learners were short of new text-

books, the problem-based method provided the learners with an opportunity to become explorers, to investigate historical facts, events and share their discovery excitement and successes with the classmates.

One of the most significant didactic principles in history teaching is – history from the proximal zone (nearest) to the more distant (Figure 1). A little child gets in touch with the historical facts already in its family, house, street or yard. The family plays a major role in arousing of interest in historical events, which involve the particular family. At first the child finds out information on the times passed subconsciously – by sight, touch and hearing, as the child gets insight into its family's experience, its house, its yard's life. At school the child comes across the history subject in the timetable. It describes abstract events as they have occurred once upon the time in the near and far away countries. If the child has developed interest in history observed and discovered nearby in childhood, then later at school he has greater motivation to find out something about further developments of events as well. The teacher has to know how to keep these pupils' interest alive, to stimulate them for further activities.

The problem-based educational methods' modelling was started by the following model (Tomašūns 1995):



The human during his life-span

Figure 1. The process of history cognition (Tomašūns, 1995)

For the contemporary school one of the most difficult tasks is history teaching, especially the teaching of History of Latvia. Parents often have left blank their children's interest in their own family history; the family is not familiar with the history of their own village, town and the area. The schoolchildren surveyed at the beginning of the teaching/learning process responded that history is a boring, uninteresting science, which is hiding on dusty bookshelves or archives and is not necessary for live people in their life. This problem with teaching of History of Latvia can also be explained by the fast social, political and economic changes taking place in the state of Latvia, which demanded appropriate changes in the contents and methods of history teaching as well. The cognition of the history contents is a part of the educational process (Figure 2). This approach not always ensures critical acquiring of history and student comprehension on their own and the society correlations. Therefore, for the state regulated history contents acquisition, the development of the student creative action and critical thinking development is significant. It can be provided by problem-based teaching/learning. I have tested it during several years of work with secondary school students in history lessons and by use of the problem-based method.

The problem-based teaching/learning allows using learner cognition stimulation for guiding them to new discoveries at lessons. Even failures or errors made by students can be turned into problems by solving of which the students can gain success in their educational process. The problembased teaching/learning allows the students to look critically at the traditional myths of history or on the never-taken-place facts announced in the social space, or at the interpretations of historical events. For example, the story about the founding of Riga is borrowed from Phoenicians, who have a similar story about founding of Carthage. Thus, it was found out that Zemgalians did not take part in the Sun Fight, where the Order of the Livonian Brothers of the Sword (Latin: Fratres militiæ Christi Livoniae) was defeated, that Oskars Kalpaks had never been Supreme Commander-in-Chief of Latvia's Army.

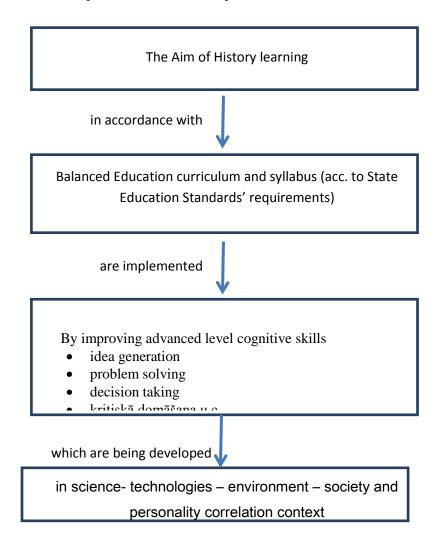


Figure 2. The Process Approach to Cognition of History (Adapted acc. to Tildseps, 2011)

The problem-based teaching/learning is based on student historic self-experience and skill to update their own experience. For the teacher teaching of history, for the students learning of history turn into collaboration at the lessons, where also the upbringing and self-upbringing educational processes inevitably take place (Špona, 2006). The self-experience allows the students to perceive the current history problem to be acquired. The author proposes the following model of problem-based cognition process (Figure 3).

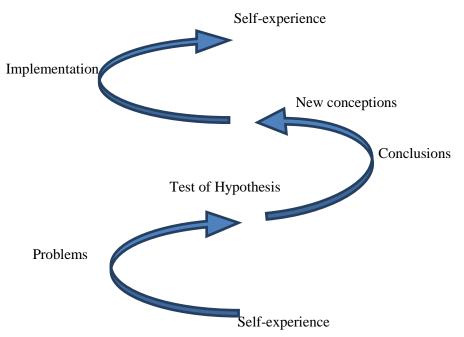


Figure 3. Model of problem-based cognition process

The teacher's mastery, his deep knowledge and comprehension gives possibility to involve the students, get them interested in the self-experience exchange process at the lesson and defining of the problem. In order to solve the history problem, it is necessary to see the contradictions in the problem and define the hypothesis – presumptions, which would allow solving and resolving of the problem as a result of testing.

The hypothesis – presumptions testing is an exciting stage in the entire cognitive process of students' activity. The student - researcher's position is the most significant in the hypothesis testing. He feels like an important researcher of new verities at learning. It shapes learning as a personally important action for students. The teacher also takes responsibility for the student's emotional experience in the cognitive process during the teaching/learning process. The verities by the hypothesis testing become comprehensible, long-lasting and usable for the student.

Implementation of new verities is especially significant in the problem-based teaching/learning for skills ability, as it empowers the new verities gained in the educational process (Битинас, 1972). The learner's development is ensured by the internal and external unity – exteriorization and interiorization processes (Леонтев, 2007). The common sense of the activity, how the learner understands that the aims and motives', correlation stimulates their thinking.

Thus, by democratization gaining power in all branches of life, this process is especially significant in history acquisition at school. Freedom, autonomy and responsibility cannot be induced into students by "*talking*". These qualities are developed as habits by learning. The experience proves that such values are developed if the students excitedly and with great interest learn history, particularly History of Latvia.

During the pedagogic practice, while surveying the learners, an attempt was made to find out their self-assessment on the knowledge, skills gained in education process. The surveys were carried out at the beginning of the academic school year to establish the learners' expectations of the learning process, and at the end of the school year – to establish what is considered as the most significant gains for them. By developing the below displayed table (Table 1) only some of the learners revealed self-evaluations and observations are pointed out.

	Year 2000 53 respondents	Year 2001 97 respondents	Year 2002 83 respondents	Year 2007 53 respondents	Number of total respondents 286 or 100%		
Was learning difficult?	7	29	10	10	56 or 19,5 %		
Teaching/learning methods were new, non- traditional	53	80	45	32	210 or 73%		
Gained autonomous work skills	33	42	57	2	134 or 47%		
It was interesting, awakened interest in history	26	20	25	15	86 or 30%		
The old teaching/learning methods were better	1	11	3	3	18 or 6%		

**Results of research** 

The surveys were carried out at the beginning of the school year to establish the learners' expectations of the learning process, and at the end of the school year – to establish what is considered as the most significant gains for them.

Some citations from the surveys of the learners of Form 12, at the graduation in 2002.

Learner A: "...you taught many of us to reason correctly and find orientation in mutual relationships, relations with society, between the society and the state, individuals and the state".

Learner B: "Work of history – has changed humans. The attitude towards history has changed. Respect to me and others. I do not perceive history as a dull subject anymore, but as a subject, where the human can expand and develop their imagination".

Learner C: "I have to admit that I didn't want to learn much, but I did so".

Some citations from the surveys of the year 2012 graduates.

Year 1996 Graduate A. "Considering knowledge the most important is that we were given an opportunity to learn the history of Jelgava – the city and its area, which was an innovation in the History curriculum. Although, the factual knowledge is not especially fresh in my memory, yet the Jelgava regional history curriculum had helped to identify ourselves and the importance of the native place in our life (maybe it was not of prime importance during the school years, but now it causes such thoroughness – a link with Jelgava)."

Year 2000 Graduate B: "When you started to teach us, I understood that in reality up to that moment we had learned and known nothing. Then it seemed very important to memorize by heart for the test and get a pass, but now we are interested in knowing, especially, the history of Latvia. I love learning things by seeing, doing things in practice, because they are highlighted in memory so."

Year 2004 Graduate C: "Therefore, the best that gained during the single year in your class is the model of relationships in class, which was tended to adults and students' collaboration principles. You helped us to believe our forces and our talents.

Year 2007 Graduate D: "I learnt and the teacher taught, and helped to understand how important it is to attain everything by myself – by reading, exploring, writing, analyzing and seeing. Summarize and listen to experienced person's words and stories. And the most important to understand how interesting and relevant everything is. Not only listen to, but hear, understand and remember too. Be able to overcome yourself, and change the interest in history, people and also to life in general."

## Conclusions

- By assessing pedagogical experience for teaching History of Latvia, the author recommends to use such teaching/learning methods at secondary school, which being based on the collaboration pedagogy theory verities promote more motivated learners' involvement into the learning process of History of Latvia. By assessment of the verbal educational methods used in practice, the author gives his preference to the problem-based educational method.
- By implementation of the problem-based educational method it was possible to establish how a shift in the student's thinking takes place. At the training sessions under the created conditions, the learners on the basis of their acquired knowledge, autonomously and by collaboration with other learners and the teacher were solving the suggested learning problem. By thinking together and acting, the optimal problem resolution options were looked for. By organizing the learners and the teacher's collaboration during the education process, on the basis of the teaching/learning problems and the action theory, considerably increased the learners' autonomous cognitive activity part. By solving and resolving problem-situations, the learners' thinking intensity was reinforced and increased for search of new knowledge and new approaches to solving of the tasks. The acquired skills and abilities during the teaching/learning process have been useful not only at the lessons of history. It is approved by the questionnaires of the former students, by the time distance, the self-assessment given and the assessment of the then accomplished teaching/learning process.

## References

- 1. Dewey, J. (1916). Democracy and Education. An introduction to the philosophy of education (edition, 1966). New York: Free Press, p.78.
- Saye J.W., Kohlmeier J., Brush T., Maddox L., Howel J. (2008). Developing a Professional Knowledge Culture for Problem-based Historical Inquiry. Scaffolded Lesson Study. Presended at the annual meeting of the American Education Research Association (March 26, 2008). New York, NY. [online] [02.02.2012]. Available at http://dp.crlt.indiana.edu/publications/AERA08\_saye.pdf
- Spudiņa M. (2003). Mācību darbs vēsturē vidusskolā (History education in highschool), Rīga: RaKa, pp. 5 - 8. (In Latvian)
- 4. Špona A. (2006). Audzināšanas process teorijā un praksē (Educational process in theory and practice), Rīga: RaKa, 160.-193. lpp.(In Latvian)
- Tomašūns A. (1993). Jelgavas novada vēsture (Jelgava regional history). Rīga, Izglītība, p. 120. (In Latvian)
- Tomašūns A. (1995). Vēlreiz par novada vēsturi (Once more about the history of the region). Izglītība un Kultūra: Latvijas Vēstures skolotāju asociācijas pielikums Nr.1 (1995.04.05.), pp. 2. (In Latvian)
- 7. Wood E.J.(1998). The Problems of Problem-based Learning. [online] [02.02.2012]. Available at <u>http://boxmind.leeds.ac.uk/news/conference\_04\_05/documents/WoodKeynotePPT.pdf</u>
- 8. Битинас Б. (1984). Структура процеса воспитания (Structure of the educational process). Каунас: Швиеса, 112 с. (In Russian)
- 9. Леонтев Д.А. (2007). Психолгия смисла (Psychology of thought). Москва: Смысл, 510 с. (In Russian)
- 10. Махмутов М.И. (1977). Организация проблемного обучения в школе (Problem-based education organization in school). Москва: Просвещение, 240 с.(In Russian)
- 11. Оконь В. (1968). Основы проьлемного оьучения (Basics of problem-based education). Москва: Просвесчение, 208 с. (In Russian).

# **Education for getting competence**

## TEACHER FURTHER EDUCATION FOR PROFESSIONAL DEVELOPMENT

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**Abstract**: Teacher further education is one of personal professional development factors. Teacher professional development is a topical issue as it includes the processes of education and further education, and totally it is one of the most important factors of development and up-dating of education. The article analyses and summarises teacher further education experience at the Latvia University of Agriculture (LLU). At the university a potential is needed to ensure qualitative teacher further education in professional development. In order to organize further education of teachers at first the requirements and needs of the teachers for professional development were stated. The article analyses the latest research results that were obtained in 2011 implementing the program of teacher further education. For research in the further education strategy and clarifying professional development the enquiry method was applied using enquiry forms and partly structured interview as well as reflection of personal experience. In the research theoretical and empirical data processing methods are applied.

Keywords: further education, professional development, programs of teacher education.

#### Introduction

Dynamic changes in today's society bring forward more and more multiform and complicated requirements for teachers and the whole system of education. In the changing conditions of the society teachers meet countless questions and problems that need to be solved.

Education is understood as continuous self-development. Learning society is considered to be a decisive factor for further development of Latvia. Acquisition of knowledge is centered on the human factor transferring from teaching to learning, to respecting of independency, expressing oneself in activities and acquisition of communication skills.

Teacher further education is one of personal professional development factors. In order to adapt to the changing conditions everyone should create possibilities to improve professional knowledge lifelong. Teacher professional development is a topical issue as it includes the processes of education and further education, and totally it is one of the most important factors of development and up-dating of education. It means that the efficiency of the educational system first of all depends on the level of teacher training and adequacy for work.

Further education in Latvia is known as continuation of education and professional development after acquisition of the formal education and starting to work. Its aim is development of professional knowledge, skills and competences in the system of formal and informal education. Teacher further education usually goes along with work. One of the kinds of further education is rising of qualification in acquisition of further education programs.

The aim of the article conscious and purposeful satisfaction of teachers with further education in professional development.

## **Topicality of the problem**

Teacher further education is one of the priority trends of education strategy. New requirements for education and training of teachers are determined by the society development dynamics. This demand is always contradictory – on the one hand, society wants the system of education to ensure handing the accumulated cultural heritage – values, knowledge, experience – over to future generations, on the other hand, society hopes that it will be education that will help solve future challenges. Exactly these needs of society determine the dual nature of education – it is conservative and at the same time changing fast (KomPas: rokasgrāmata pieaugušo izglītības pasniedzējiem, 2003).

#### Materials and methods

The article analyses and summarises teacher further education experience at the Latvia University of Agriculture (LLU) and explains how the mentioned problem has been solved at the Institute of Education and Home Economics (IMI) in cooperation with the Lifelong Education Center of the Latvia University of Agriculture. The LLU has its intellectual, scientific, cultural and administrative potential to ensure qualitative further education for teachers. One of the teacher professional development possibilities is further education. It is the most available and flexible way for working teachers how to regularly and systematically follow the newest trends in pedagogics (Aizsila, 2010).

From 2008 the Lifelong Education Center in cooperation with the LLU teachers implement 17 professional development education licensed programs. IMI takes an active part in the sub-activity "Rising of qualification of teachers involved in education at the LLU" of the European Social Fund program for 2007-2013 "Human Resources and Employment" (LLU darbības stratēģija 2010-2016 gadam, 2010).

The Head of the Lifelong Education Center I.Švāne says in the interview that "... there is a wide range of further education programs at the university; three programs are for professional development of teachers; the number of participants has increased from five in 2007 to 123 in 2011".

To organize further education for teachers at first the requirements and needs of the teachers for professional development were stated. The teachers of the LLU are developing new content for further education courses, organization of work for everybody to be able to choose the program best suited for their needs.

The research has been performed in a longer period of time (from 2007), but the article analyses the latest research results on the necessity for teacher further education and development. 47 teachers from Jelgava, Rīga, Ogre, Olaine, Valmiera, Ventspils, Rēzekne and other professional education establishments participated in the research. The article analyses the evaluation of the further education program from the point of view of teachers.

In selection of the research methods the statements of cognitive teaching theory were considered summarizing the experience of the researchers B.Lanstrups, T.Koke etc. (Lanstrup, 2002; Koke, 2005). For research in the further education strategy and clarifying professional development the enquiry method was applied using enquiry forms and partly structured interview as well as reflection of personal experience. For data processing and analysis MS Excel statistical functions, data grouping, analysis and synthesis were used. The data obtained by the quantitative and qualitative methods supplemented one another and formed a more precise concept of the research result. In implementation of teacher further education and professional development the analytically and empirically descriptive way of research was used.

## **Results and discussion**

The geopolitical situation of our country, the limited raw material resources determine that the factors ensuring competitiveness of Latvia are and will be well educated and qualified staff. It can be achieved with the reform of the system of education, and we all need to understand that it is necessary to learn. Teachers play an important role in this process. It depends on the teacher's abilities, talent and knowledge how active and knowing the young people will be.

The issue of teacher further education is topical not only in Latvia but also in Europe as solutions are being searched for organization of the activities of teachers in the process of studies in order to maximally ensure the acquisition of the necessary knowledge and skills of students. The requirements for education are expressed by the words – knowledge, skills, competences, lifelong education, further education, adult education, self development, mobility.

To implement the state education policy successfully and meet the professional further education needs of teachers in the project of the European Union structural fund program "Development of teacher further education methodical net" (Pedagogu tālākizglītība..., 2008) a new approach is elaborated with the aim to improve the quality of education creating prerequisites for purposeful and coordinated further education.

Becoming part of the European education space the Latvian education system is developed to meet the international education qualification. Its development is planned in accordance with internationally stated basic statements in the field of education (Boloņas process; Rauhvargers, 2003).

The research is based on conceptual statements of several authors in pedagogical literature as well as on the documents on the education development strategy, politics and organization in the 21<sup>st</sup> century (Delors, 2001).

In the theoretical aspect publications of foreign authors H.Henting, M.S.Knowle (Heting, 1999; Knowles, 1980) and Latvian scientists, research materials related to explanation of the notion further education and teacher professional development are used.

Teacher professional development is improvement of the quality of teacher professional skills. The notion teacher professional development is used in relation to further education that is necessary for every teacher to be able to implement in the profession al activities the topical basic statements expressed in the Education law (Izglītības likums,1998) and Education development basic statements for 2007-2013 (Izglītības attīstības pamatnostādnes 2007-2013gadam) and other documents related to education policy (A Memorandum...,2000; Criteria and procedures...2009). Teacher further education is the basis for development of the quality of work of teachers.

With the change of the pedagogical paradigm the personal ability to study consciously, independently and purposefully, develop knowledge, skills and pedagogical competence becomes topical. I.Žogla states that teacher professionalism is "a complicated formation that develops in uniformity of theoretical knowledge and practical activity" (Žogla, 2001, 3). According to the Further education memorandum elaborated by the European Council that was signed in Brussels in 2000 it has been stated that the process of education continues lifelong, it is based on changing needs to acquire knowledge, experience in order to improve or change the qualification in compliance with the market demands and own interests and needs (A Memorandum on Lifelong Learning, 2000).

Already at the beginning of the 20<sup>th</sup> century American teacher J.Dewey stated that education cannot be interrupted with finishing school, it is obvious truth...the mission of school as an organization is to ensure continuation of education. According to J.Dewey the whole society should be in the continuous process of learning. Education, according to the opinion and experience of J.Dewey, is the main instrument of improvement of society democratization that ensures equal possibilities for the citizens. Only through education people can implement their social initiatives (Dewey, 1994).

The change of the pedagogical paradigm is characteristic with changes in the education philosophy, with a new model of thinking, scientific outlook, education development overview, understanding of further education values and their recognition (Šmite, 2004).

The entirety approach in further education can give a maximally objective notion about things, phenomena and processes. In turn, the systemic approach helps form understanding on the complex nature of the researched problems and search for the optimal solution. The necessity for system thinking is substantiated and confirmed by the statement of A.Broks that ...today we often lack the so necessary clear understanding of the basic statements of education problems as everyday multiformity that has increased so fast and the pace considerably interfere with general orientation and implementation of coordinated activities in education (Broks, 2000).

Teacher further education is a process where teachers develop further, deepen their knowledge, skills and competences. Its main characteristics are continuity of the process, coordination of the process elements, systematism, active work and a wish to develop that manifests in improvement of professional competence and the quality of education.

People gradually come to the conclusion that learning allows for improving of the quality of life and work, in turn, acquisition of experience promotes further learning. P.Jarvis states that purposeful learning is a typical trait nowadays. The mentioned trait demands new attitude towards learning (Jarvis, 2001; 2007).

Consequent, planned, stable taking of education policy decisions is one of the conditions for the result of work invested in further education. The knowledge and skills acquired at further education courses help teachers to apply them in lessons. The aim of teacher further education is to improve the process of studies, give teachers additional methodology, strategies how to work more efficiently.

Flexibility and usefulness of teacher knowledge in today's changing conditions depends to a large extent on further education. The notions teacher and quality of education cannot be separated. This unity needs to be supported by further education.

In the conditions of the changing education paradigm it is necessary to evaluate and activate the work of further education. For this new programs are developed, different courses, seminars and teaching cycles are operating. Development of teacher further education programs is dynamic and can offer practical and efficient advices for self development and improvement of work.

Development of teacher further education programs is characterized by human pedagogic approach – development of personality is the central point. The aim of implementation of further education programs is to create a scientifically grounded, sustainable, updated teacher further education and methodical support system.

The article analyses and summarises the opinions of teachers involved in the further education program in 2011on the importance of further education in professional development, compliance of the content of studies with their interests and needs. To state the efficiency of further education the involved persons at the end of the study course had to answer anonymously 11 questions of the enquiry form to evaluate the significance of the course and the acquired knowledge as well as to assess the quality of teacher work. 47 respondents participated in the enquiry from different regions of Latvia.

To the question what factors influenced the choice to study in the further education courses 51.1% respondents answered that they were stimulated by the school administration, but 46,7% consider that they themselves are interested in rising their qualification. It proves that teachers understand the necessity to supplement their knowledge that is related to changes in education policy, professional work of teachers and development of personality.

The results obtained in the enquiry show that in the result of acquisition of the further education program the aim has been achieved -84% of the respondents. Most of the teachers 94% have actively participated in the work of the courses. It shows that the teachers have actively participated in discussions on topical education problems; the process of studies has been active and interesting.

The teachers had an opportunity to choose the desirable time for the further education course (Fig.1).

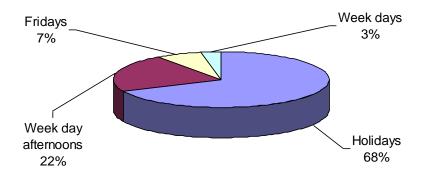


Figure 1. Choice of time for the course

Organising and planning the courses the choice of the respondents is considered. Already for several years the courses are organized on Saturdays. Also this year 68% agree that Saturday is the most appropriate time for studies. The teachers approve team work, practical sessions and lectures (Fig. 2) as the experience acquired in them stimulates development of self-initiative and analytical thinking skills as well as work in team and the skills are practically applicable.

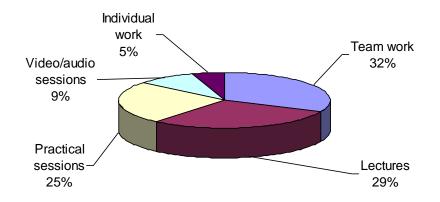


Figure 2. Choice of the kind of sessions

The obtained results show that the teachers will apply the new knowledge in their direct work at school (43%), in social work in society (43%) and 15% will use it in family.

The teacher responses about the quality of the courses had to be in detail evaluated according to four criteria – very good, good, average and bad. They had to answer questions about the content of the courses, methodical handout materials, efficiency of information and microclimate in the process of studies (Fig. 3).

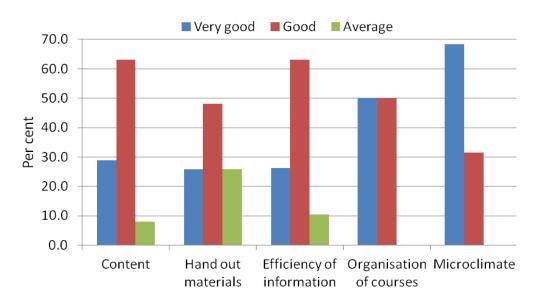


Figure 3. Course quality evaluation by the respondents

The figure shows that the teachers have evaluated the quality of the courses according to the stated parameters from different aspects.

The teacher competence was highly appreciated (61%). It is positive that the participants of the further education courses are very satisfied with the attitude of the teachers in the process of studies (68.3%) in Fig. 4.



Figure 4. Evaluation of teacher competence and attitude from the point of view of the respondents

To improve the quality of the procedure of the courses it is necessary to know the information on what has to be changed or improved in the content of studies and procedure organizing further education courses for teachers. Summarising the opinions it can be concluded that a wish was expressed to supplement the content of studies with adult psychology (55%) and issues about teaching methods (15%) and to supplement the amount of methodical materials.

#### Conclusions

- The Latvia University of Agriculture participates in implementation of the education policy and the teachers actively involve in development and implementation of further education programs. The research results prove the positive influence of further education on development of teacher competence. Based on the data obtained in the result of the research it can be concluded that many of those who are involved in further education understand the necessity for education, its importance in professional development. The results obtained in the enquiry show that in the result of acquisition of the further education course programs the aim has been achieved 84% of the respondents.
- The participants of the further education program appreciate the obtained knowledge and their practical significance as it can be applied directly for improvement of the teaching process at school (43%) and it will be useful in social (43%) and family life. Involvement in further education meets the needs of personal development as well as the needs of society.
- The main characteristic values of further education are continuity, sistemism, coordination of elements, active teacher activities that manifest in professional development.
- The research gave a possibility to know the opinion of the teachers and attitude about further education, its significance in professional development. Professional development ensures a possibility to apply new teaching/learning methods, technologies, to form appropriate education environment, to promote the result of the education process and raise its quality.
- The authors of further education programs should pay more attention to adult psychology problems and communication skills.
- Teacher further education has to be implemented in conditions when financing from the budget and teacher salaries in Latvia are decreasing fast. The government should support more the further education aspirations of teachers.

## References

- 1. Aizsila A. (2010). *Implementation of Further Education Program for Teachers*. Latvijas Lauksaimniecības universitātes Raksti (Proceedings of the Latvia University of Agriculture) Nr.24 (319), Jelgava, LLU, p.76-85.
- 2. *A Memorandum on Lifelong Learning* (2000). [online] [18.11.2011]. Available at: <u>http://www.tip.edu.lv/faili/muzizglitibas\_memorands.doc</u>
- 3. *Bologna process.* (Bologna Process and the recognition of Professional qualifications), [online] [10.11.2011]. Available at: <u>http://www.ond.vlaanderen.be/hogeronderwijs/bologna/</u> (In Latvian)
- 4. Broks A. (2000). *Izglītības sistemoloģija*. (Systemology of Education.), Rīga, RaKa, p. 172. (In Latvien)
- 5. Criteria and procedures for referencing national qualifications levels to the EQF (2009) http://nkp.europass.lv/wp-content/uploads/2010/09/1 4 criteria en.pdf
- 6. Delors Ž. (2001). *Mācīšanās ir zelts*. (Learning: The treasure within), Rīga, UNESCO LNK, p. 225. (In Latvian)
- 7. Dewey J. (1994). *Democracy and Education*. New York, Copyright 1916 The Macmillan Company.
- 8. Heting H. (1999). *Ach, die werte. Ein öffentliches Bewusstsein von zwiespältigen Aufgaben.* Über eine Erziehung fur das 21. Jarhundert, Hanser, München, Wien.
- Izglītības attīstības pamatnostādnes 2007.-2013.gadam. (Basic Statements of Education Development for 2007-2013.) [online] [18.11.2011]. Available at: <u>http://izm.gov.lv/upload\_file/Normativie\_akti/izm\_260906\_izgl\_attpamatnost\_2007-2013.doc</u> (In Latvian)
- 10. Izglītības likums (Education Law). Latvijas Vēstnesis Nr.343/344, 17.11.1998. (In Latvian)
- 11. Jarvis P.(2001). Learning in Later Life: An Introduction to Educators and Carers. London, Kogan Press, UK, p.192.
- 12. Jarvis P. (2007). *Globalization, lifelong learning and learning society*. Sociological perspectives. Routledge: London, UK.
- 13. Knowles M.S. (1980). *The Modern Practice of Adult Education*. Rev.ed. Chicago, Association Press/Follett, p.263-275.
- 14. Koķe T. (2005). *Pētījumi pieaugušo pedagoģijā* (Studies of Adult Education), Rīga, LU Akadēmiskais apgāds, p.119. (In Latvian)
- 15. *KomPas: rokasgrāmata pieaugušo izglītības pasniedzējiem*. (2003). (KomPas: Manual for Adult Education Teachers), galv. red. T.Urdze, Rīga, LPIA, p.231. (In Latvian)
- 16. Lanstrup B. (2002). Teaching Adults with openness. KLIM, p.124
- 17. LLU darbības stratēģija 2010.-2016. gada plānošanas ciklam. (LLU Strategy for 2010-2016 Planning Cycle), [online] [10.11.2011]. Available at: <u>http://www.llu.lv/getfile.php?id=16386</u> (In Latvian).
- Pedagogu tālākizglītības metodiskā tīkla nodrošinājuma izveide. Rokasgrāmata. (2008). (Development of Methodical Net Ensuring for Teacher Further Education. Handbook), Rīga, Vispārējās izglītības kvalitātes novērtēšanas aģentūra (Evaluation Agency of General Education Quality), p. 96. (In Latvian).
- Rauhvargers A. (2003). Latvija Boloņas procesā. (Latvia in Boulogne Process) [online] [10.11.2011]. Available at: <u>http://www.aic.lv/rec/LV/new\_d\_lv/Latvija/LV\_Bol\_lv.doc</u> (In Latvian)
- 20. Šmite A. (2004). Izglītības iestādes vadība. Pedagogs. Organizācija. Pārmaiņas. (Educational Institution Management), 1.d. Rīga, RaKa, p. 256. (In Latvian)
- 21. Žogla I. (2001). Školas pedagoģija.(School Pedagogics), Rīga, LU Pedagoģijas un psiholoģijas institūts, 1-3 lpp. (In Latvian)

#### MATHEMATICS TEXTBOOK FOR CITIZENSHIP EDUCATION

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**Abstract:** In a fast-changing and interdependent world, education should help young people to meet the challenges they will confront now and in the future. Citizenship education is essential in helping young people rise to those challenges. Citizenship education includes the nature and practices of participation in democracy, the duties, responsibilities and rights of individuals as citizens; and the value to individuals and society of community activity. Preparing students for citizenship involves developing relevant knowledge and understanding as well as encouraging the formation of positive attitudes toward being a citizen. Textbooks, as the media, provide advice on effective education for the citizenship in schools. Mathematics textbooks should provide pupils with the basic skills and knowledge that will help them to make a worthwhile contribution to society and its positive development. The article reflects the Grade 4 and the Grade 6 mathematics textbooks theoretical analysis carried out by using the following criteria: citizenship knowledge, citizenship skills, citizenship values and attitudes. Selected criteria are characterized by the use of a book in citizenship education.

**Keywords:** citizenship education, mathematics, textbook.

#### Introduction

The 21st century with its rapid processes of globalization and change in educational paradigm adds another important challenge to the wide range of tasks for schools – acquiring of democratic values by students already at school during the relevant stages of the education process.

Education plays an important role in fostering active and responsible citizenship. Besides parents, the wider family, friends and the local community, schools are the main setting for socialisation. One of their aims has always been to prepare young people for life in the adult world. It is thus important that they should provide pupils with the basic skills and knowledge that will help them to make a worthwhile contribution to society and its positive development (Citizenship Education at School in Europe, 2005). Education Law, Article 2 provides as an aim to ensure that every Latvian citizen is provided opportunities to develop his or her mental and physical potential in order to become an independent and fully developed individual, a true member of the democratic Latvian state and society. According to the learner's age and needs an opportunity is given to: 1) acquire knowledge and skills in the field of humanitarian, social, natural and technical sciences; 2) acquire knowledge, skills and social experience enabling to participate in social and public life; 3) develop morally, aesthetically, intellectually and physically in order to form a knowledgeable, skilful and socialized personality (Education Law, 1998).

As a result of targeted educational process the students develop and realize a civically significant attitude, essential for a citizen, towards the duties and rights established by the law of the given country. Many pedagogical tools serve this purpose: learning content, learning/teaching methods, education/self-education methods, educational literature. Currently, the Latvian teaching environment is mainly involved in discussion of teaching methods and course content selection, as well as multicultural education and inclusive education issues. There have been fewer studies on the impact of textbooks on the citizenship education of the new generation.

## Materials and methods

#### The awareness of citizenship education

Citizenship is often understood as a universal concept. All citizens in a nation state are equal before the law. Simply put, citizenship is membership of a nation state, which is deemed as the solitary locus of the political community (Carens, 2004). Membership of a political community gives an identity to an individual that supersedes all the other identities such as that of religion, gender and class.

Citizenship constitutes an overwhelming identity masking all other identities to produce masked and unmarked (and therefore) "equal" citizens of the nation (Roy, 2003). Citizenship education focuses on knowledge and understanding and on opportunities for participation and engagement in both civic and civil society. It is concerned with the wider range of ways through which citizens interact with and shape their communities (including schools) and societies (Schulz, Ainley, Fraillon, Kerr, Losito, 2010). Exists a challenge that could contribute to a more holistic understanding of how to achieve citizenship in modern-day Europe:

- diversity of living in increasingly socially and culturally diverse communities and societies;
- location of the nation state no longer being the "traditional location" of citizenship and the possibility of other locations within and across countries, including notions of "European", "international", "transnational" or "cosmopolitan" citizenship;
- social rights of changes in the social dimension of citizenship brought about by the impact of an increasingly global economy;
- participation of engagement and participation in democratic society at local, national and international levels (Kerr, 2003; Jenson, 1996).

Citizenship education is constituted by: being aware of fundamental ideas and information about one's own country thus becoming an effective and responsible citizen; skills to be developed during the learning process, including participation skills in the national policies and public life issues, expression of one's views, making impact on the public life of one's country; citizenship qualities such as tolerance, respect towards each individual, compliance with the law, loyalty to the state, sense of responsibility, and common values – traditions and holidays (Sāne, 2003). Citizenship education is normally meant to guide pupils towards (a) political literacy, (b) critical thinking and the development of certain attitudes and values and (c) active participation (Table 1) (Citizenship Education at School in Europe, 2005). These three categories of objectives are interdependent and correspond to a continuous logical sequence in terms of how far aspects of learning are formally specified and the degree to which pupils are involved in them.

The teaching of citizenship is not enough — it is the learning of citizenship which is essential. This must comprise not only the development of intercultural understanding (the affective level), but also the acquisition of operational competence (the cognitive level) — and both are best gained through practice and experience (the pragmatic level) (Crenson, 2006). Citizenship education may be organised in different ways, depending on the level of education and organisation of the curriculum in the country concerned. It may be offered as a separate subject (often compulsory), or may be integrated into conventional subjects (such as history, social studies, geography or philosophy) or be conceived as a cross-curricular theme (Citizenship Education at School in Europe, 2005; Schulz, Ainley, Fraillon, Kerr, Losito, 2010).

In Latvia according to the curriculum for basic education in use since 1 September 2006, the time allocation for citizenship education as a separate subject will increase significantly (Basic Education Standard, 2006). On the basis of citizenship education lies the idea of the development of a free, creative and responsible individual. The desired objective of citizenship education is to foster that people who live in Latvia are independently minded and socially responsible individuals for whom the idea of Latvian National Independence is important. Latvian education system should promote the formation of a personality, able and willing to listen to different points of view, addressing issues important for the disabled, the community and the state, as well as competent in the social processes, politics, culture, and economy.

Table 1

Components Content Aims • learning about social, political and civic relates to the formal acquisition of theoretical knowledge; institutions, as well as human rights; the acquisition of knowledge focused • the study of conditions under which people transmission mainly on the of may live harmoniously together, social issues information and knowledge regarding and ongoing social problems; • teaching young people about national the history and geography of the country Political concerned, the underlying principles of literacy constitutions so that they are better prepared its constitution. and its main to exercise their rights and responsibilities; organisational patterns and political • promoting recognition of the cultural and system; historical heritage; essentially passive understanding on the • promoting recognition of the cultural and part of pupils. linguistic diversity of society. requires greater involvement by them in • acquiring the skills needed to participate terms of opinions and attitudes; actively in public life; seeks to develop the awareness and • developing recognition of and respect for attitudes needed for young people to oneself and others with a view to achieving engage in action within society as wellgreater mutual understanding; informed and responsible citizens. • acquiring social and moral responsibility, including self-confidence, and learning to behave responsibly towards others; Critical • strengthening a spirit of solidarity; thinking, attitudes and • the construction of values, with due regard values for differing social perspectives and points of view: • learning to listen and resolve conflicts peacefully; • learning to contribute to a safe environment; • developing more effective strategies for fighting racism and xenophobia. • enabling them to become more involved in expects to mobilise for action and play a full part in the political, social and the community at large (at international, cultural life of the community; national, local and school levels); encompasses a broader conception of • offering them practical experience of education in active citizenship; democracy at school; provides pupils with opportunities to • developing their capacity to engage with Active develop their commitment to civic each other; participation behaviour during work in the classroom • encouraging pupils to develop project or outside it, and encourages them to initiatives in conjunction with other take different forms of initiative. Their organisations (such as community ultimate purpose, therefore, is to associations, public bodies and international encourage pupils to exploit proactively organisations), as well as projects involving what they have learned in the two other communities. previous stages.

Citizenship	education	components.	contents, aims
		· · · · · · · · · · · · · · · · · · ·	

#### Textbook for citizenship education

The medium is primarily a cultural or artistic mark, which represents the essence of the meaning or the message, and one of its characteristic features is that it can be perceived (Plaude, 2003). In a general sense a medium is an object on which data are stored or through which they are passed on for further use. Nowadays the media perform an intermediary function between the sender of the message and the recipient of the message. Thus a book becomes a link in a long chain of value creation (Pipers, 2011). One of the most powerful media that affect citizenship education is the school textbook because no other medium informs hundreds of thousands of students every year with its content as purposefully as the textbook does (Teičs, 2011). One does not choose whether to read or not to read a textbook; they are mandatory for all students.

The textbook is a secondary medium (Plaude, 2003). It works indirectly only if a student reads it, works with it and learns from it, unlike the primary media, which are means of immediate human contact, such as theater, dance, etc., or tertiary media, which are both created by technical means and can be perceived by them (TV, radio). A book is a visual mass medium which offers ready behavioral and thinking models. It comprises exercises, assignments and checklist questions envisaged to build up students' knowledge and skills, develop their learning skills and other multiple intelligences as well as self-evaluate one's achievements.

The textbook has the following functions: transforming, systematizing - systematically and successively logically structured learning material, integrative - assisting the student to obtain additional information from the related fields of science in addition to learning the content of the given textbook, coordinative - options of different learning tools (maps, illustrations, films, etc.), educational and developing – impact of the curriculum on students' values (Зуев, 1983), motivating - providing incentives creating interest, positive attitude and a desire to acquire the proposed learning material, (Подласый, 1996), awareness raising / informative - the information required to expand knowledge, consolidating and self-assessing/assessing and adjusting – opportunities to repeat the content of learning, testing opportunities, and opportunities for self-assessment (Зуев, 1983; Подласый, 1996).

The textbook is the curriculum support material, the main printed learning tool to use during the study process (Cитаров, 2004). Textbook is the basis for implementing the developed training program. The learning content included in the textbook and arranged into a logical system provides an opportunity to develop and realize positive attitude towards one's state, its laws and the nation, learn one's duties and rights, find sense of belonging to his or her nation and country, promote a desire to actively engage in public activities and processes ongoing in the country. It helps to develop an integral part of citizenship education – a civically meaningful attitude, significantly important for every citizen, towards the duties and rights stated by the state law. Consequently, the essential functions of the textbook as a medium involved in the citizenship education is to provide citizenship knowledge, promote learning citizenship skills and encourage development of citizenship attitudes and values.

#### **Results and discussion**

The contribution of the mathematics textbook in the citizenship education has been studied by analyzing alternative textbooks for Grade 4 and Grade 6 mathematics course (Table 2).

Grade 4 and Grade 6 textbooks were selected for analysis as descriptor values for one phase of education - its beginning and final stages, as the State Primary Education Standard specifies the skills and knowledge to be acquired when finishing Grades 3, Grade 6 and Grade 9 (Basic Education Standard, 2006). What is more, 4th graders are supposed to have already acquired considerable part of specific skills and knowledge in mathematics, which provides opportunities for expanding learning content through thematic approach. Mathematics content in the framework of thematic approach also includes skills which have to be developed through practical learning activities, knowledge of causal relationships within the organizing theme or concept, skills enabling to apply this knowledge in practice, as well as attitudes as personally meaningful values and goals. The propedeutic course in mathematics ends with Grade 6 and starting from Grade 7 students learn the systematic mathematics course, divided into algebra and geometry courses. One more reason should be noted for such a choice - it is the stage of adolescent age, when formation of values, cooperation and participation are highly topical issues in educational work in each and every class period, including mathematics.

Table 2

	Grude Fund Grude o mathematics texts oons used in the study						
	Mathematics textbooks						
	1. Mencis J. (sen.), Krastiņa E., Oliņa D., Mencis J. (jun.) (2000). Matemātika 4.klas						
	(Mathematics 4st grade). Rīga: Zvaigzne ABC (In Latvian)						
Grade 4	2. Valtasa I., Lude I. (2005). Matemātika 4.klasei (Mathematics 4st grade). Rīga: Pētergail						
Glade 4	(In Latvian)						
	3. Helmane I., Dāvīda A. (2006). Matemātika 4.klasei (Mathematics 4st grade). Lielvārd						
	Lielvārds (In Latvian)						
	4. Mencis J. (jun) (2000). Matemātika 6.klasei (Mathematics 6st grade). Rīga: Zvaigzr						
	ABC (In Latvian)						
	5. Mencis J. (sen), Mencis J. (jun) (2009). Matemātika 6.klasei (Mathematics 6st grade						
Grade 6	Rīga: Zvaigzne ABC (In Latvian)						
	6. Milaša I. (2008). Matemātika 6.klasei (Mathematics 6st grade). Rīga: RaKa (In Latvian)						
	7. Lude I. (2003). Matemātika 6.klasei (Mathematics 6st grade). Rīga: Pētergailis (I						
	Latvian)						

Grade 4 and Grade 6 mathematics textbooks used in the study

The study analyzes the presence in mathematics textbooks of the themes essential for citizenship education brought up by Schulz, and Ainley (Schulz, Ainley, Fraillon, Kerr, Losito, 2010). Three components with appropriate parameters have been selected as criteria for the study: citizenship knowledge, citizenship skills, citizenship values and attitudes (Table 5).

Table 3

	vividness and emotionality of the message of mathematics textbooks						
Ma	thematics textbooks	Vividness and emotionality of the message					
1.	Mencis (sen.),	Uses traditional forms of tasks, tasks related to economic					
	Krastiņa,	processes and agriculture. Tasteful use of color and task layout.					
	Oliņa,	Quite traditional task content and form.					
	Mencis (jun.), 2000						
2.	Valtasa, Lude, 2005	Uses traditional task forms, tasks related to economic processes and					
		different life activities. Historical facts have been included. Association					
		building techniques as well as project works and games have been					
		incorporated in the process of acquiring mathematical skills.					
3.	Helmane,	Offers variety of task and exercise forms; the content of the tasks related					
	Dāvīda, 2006	to diverse life activities, as well as the rhythm of the calendar year.					
		Emphasis has been laid on the graphic layout.					
4.	Mencis (jun), 2000	Quite traditional, emotionality can be attributed to the presence of					
		research tasks, perception hindered by excessively bright patchwork of					
		colours.					
5.	Mencis(sen),	Makes use of interesting historical facts, social life situations; tasteful use					
	Mencis (jun), 2009	of color and appealing graphic layout.					
6.	Milaša, 2008	The traditional content of the message makes it less expressive; the					
		author's point that some of the tasks with traditional, generalized content					
		have been included in textbooks of Latvian schools already about 80 years					
		ago is unable to reach the reader emotionally.					
7.	Lude, 2005	Uses historical facts ; however, at the same time requires a high level of					
		abstract thinking level (proof of divisibility tasks); some tasks attempt to					
		involve characters well-known to the students- teletubbies, furby etc.					

Vividness and emotionality of the message of mathematics textbooks

In order to attract students' attention and get them interested about the subject the content of the textbook should be designed in a sufficiently vivid and emotionally engaging form. To a greater or lesser extent this has been implemented in all mathematics textbooks. Particularly noted in this respect should be the mathematics textbook worked out by both professors Mencis, father and son. It attracts attention with its tasteful and emotionally vivid message, engaging students and making them participate, which is extremely important in the process of citizenship education (Table 3).

The analysis of citizenship education-related topics in mathematics textbooks finds that such topics as "Voting and elections", "Legal systems and courts", and "Resolving conflict" were not

found in Grade 4 and Grade 6 textbooks. Furthermore, some citizenship education topics could not be found in the following authors' books: for example, the textbook by Mencis does not include tasks related to the theme "Different Cultures and Ethnic Groups", textbooks by Helmane, Milaša, Ludes do not include tasks related to the theme "Communication Studies" (Table 4).

Table 4

Citizenship education topics in r Citizenship Education Topics		Grade 4 Mathematics textbooks (Table 2)			Grade 6 Mathematics textbooks (Table 2)			
Humon rights	1.	2.	3.	4.	5.	6.	7.	
Human rights Different cultures and ethnic groups								
The environment								
Parliamentary and governmental systems								
Voting and elections								
Communications studies								
Legal systems and courts								
The economy and economics								
Regional institutions and organizations								
Resolving conflict								
yes partly/sometimes no								

A dominant theme in all the Grade 4 and Grade 6 books is "Economy and Economics." Within this topic students are suggested to solve tasks involving purchase and sale, calculation of revenue and expenditure, as well as introduced to various monetary units; the term "salary" is used. The textbook by Valtasa includes the history of money and tasks about communal services, while in the textbook by Helmane tasks involving modern payment procedures can be found: credit, installment payments, and apartment prices.

Another dominant theme in accordance with the citizenship education guidelines in Grade 4 and Grade 6 mathematics textbooks is "Environment". In the framework of this theme such topics as the rural environment and agricultural processes are dealt with, especially in the textbook by Mencis; geographical information is included as well. Tasks with information on Latvian geography are included in the textbook by Valtasa; the textbook by Mencis features tasks on the geography of Latvia and the Baltic region. Content-rich tasks with data on European and world geography can be found in mathematics textbooks by Helmane.

The "Human rights" theme in all textbooks deals with tasks which accentuate the right to education and inclusion of all members of society in the socio-economic processes. The theme "Different Cultures and Ethnic Groups" in the textbook by Valtasa has been realized partly because only national values have been highlighted, such as proverbs, folk songs, national festivals like Easter, etc. In the framework of this theme the textbook by Helmane features tasks on Latvian and European Christmas traditions, as well as Latvian ethnographic values and archaic words. The "Communication Studies" topic offers students an opportunity to carry out a variety of project works and play games; the textbook by Valtasa also includes material on making presentations. The topics "Parliamentary and Governmental Systems "and" Regional Institutions and Organizations" reveal the school as an institution of national significance; several tasks have been offered including the country's historical data, facts about the National Opera, Song Festivals, and the Zoo; thus only partially disclosing the content of citizenship education topics.

The citizenship education topics, practical examples and tasks included in mathematics textbooks, can be used to encourage pupils to learn and acquire citizenship knowledge, citizenship skills, citizenship attitudes and values (Table 5).

Table 5

## Citizenship education criteria and indicators for the Grade 4 and Grade 6 mathematics textbooks

Criteria	Indicators	Grade 4 Mathematics textbooks (Table 2)		Indicators Mat text			M te	rade Iathe extbo Fable	emati oks	ics
Citizenship	theory of human rights and democracy									
knowledge	political and social, civic institutions									
	cultural and historical diversity									
Citizenship skills	involved in the life of the school and local community									
	contribute to a safe environment									
	opportunity to experiment practically with democratic principles									
Citizenship	developing values consistent with a pluralist society									
values and	learning self-respect and respect for others									
attitudes	developing capacity to engage with each other									
yes	partly/sometimes no									

Such citizenship skills as being "involved in the life of the school and local community" prevail in the mathematics textbooks for Grade 4 and Grade 6. This can be explained by inclusion of suitable citizenship education topics in mathematics textbooks, as well as by an adequate number of tasks and activities which could be applied to acquire this skill. However, citizenship knowledge issues (Theory of Human Rights and Democracy, Political and Social, Civic Institutions, Cultural and Historical Diversity) have been included in mathematics textbooks and can be acquired only partially because the books offer neither sufficient diversity of citizenship education themes, nor a sufficient number of tasks and activities. The least attention in mathematics textbooks has been devoted to learning citizenship values and attitudes.

## Conclusions

The mathematics textbook as a medium that carries a certain message serves not only to form and develop specific mathematical knowledge and skills, but also to implement citizenship education goals. When examining the contribution of Grade 4 and Grade 6 mathematics books to citizenship education it can be concluded that:

- Themes of citizenship education, which traditionally have been consistent with the specific mathematics curriculum dominate in mathematics textbooks, for example, The economy and Economics, The Environment.
- Mathematics textbooks include practical examples and exercises thus providing students with an opportunity to learn such citizenship skill as involvement in the life of the school and local community, which is consistent with the citizenship education theme prevailing in mathematics textbooks.
- The diversity of citizenship education topics in mathematics textbooks and the number of tasks and practical examples only partly promote citizenship education because the amount of topic content as well as the number of practical examples and tasks is insufficient.
- To encourage pupils to learn and acquire citizenship knowledge, citizenship skills, citizenship attitudes and values a variety of citizenship education topics, as well as practical examples, tasks and activities consistent with citizenship education themes must be included in mathematics textbooks.

#### References

- 1. Jenson J., Phillips S.D. (1996). Regime Shift: New Citizenship Practices in Canada, *International Journal of Canadian Studies*, Vol.14, p 111-135.
- 2. Kerr D. (2003). Citizenship Education in England: the Making of a New Subject, *Journal of Social Science Education*, Vol. 2, p 2.
- 3. *Izglītības likums* (1998) (Education Law), [online] [18.09.2011.]. Available at <u>http://www.likumi.lv/doc.php?id=50759</u> (In Latvian)
- 4. *Valsts Standarts pamatizglītībā* (2006) (Basic Education Standard), [online] [18.09.2011.]. Available at <u>www.visc.gov.lv</u> (In Latvian)
- Carens J.H. (2004). Citizenship in Multicultural Societies. International Seminar on Democracy, Multiculturalism and Armed Forces: the Challenges to Human Security. [online] [18.09.2011.]. Available at www.cdaacd.forces.gc.ca/bolivia/engraph/seminars/mar2004/papers/Carens\_e.pdf
- 6. *Citizenship Education at School in Europe* (2005). [online] [18.09.2011.]. Available at <u>http://www.eurydice.org</u>
- Crenson E. (2006). Learning for active citizenship: a significant challenge in building a Europe of knowledge. [online] [18.09.2011.]. Available at http://ec.europa.eu/education/archive/citizen/citiz\_en.html
- 8. Roy A. (2003). *Globalization and Citizenship: Contests, Ambiguities and Alternatives*. [online] [29.10.2011.]. Available at <u>http://iegindia.org/occ\_anupama\_10.pdf</u>
- 9. Schulz W., Ainley J., Fraillon J., Kerr D., Losito B. (2010). *Initial Findings from the IEA International Civic and Citizenship Education Study*. [online] [18.09.2011.]. Available at <u>www.iea.nl</u>
- 10. Pipers E. (2011). *Draudi vai iespēja grāmata un grāmatu tirgus digitalizācijas laikmetā* (Treat or opportunity- book and book market in the digital era), [online] [18.09.2011.]. Available at www.goethe.de (In Latvian)
- 11. Teičs. R. (2011). *Konfliktu mediācija un izglītošana starpvalstu mācību grāmatas* (Conflict mediation and education- interstate textbooks) [online] [18.09.2011.]. Available at www.goethe.de
- 12. Helmane I., Dāvīda A. (2006). *Matemātika 4.klasei* (Mathematics for 4th grade). Lielvārde: Lielvārds (In Latvian)
- 13. Lude I. (2003). *Matemātika 6.klasei* (Mathematics for 6th grade). Rīga: Pētergailis (In Latvian)
- 14. Mencis J. (sen.), Krastiņa E., Oliņa D., Mencis J. (jun.) (2000). *Matemātika 4.klasei* (Mathematics for 4th grade). Rīga: Zvaigzne ABC (In Latvian)
- 15. Mencis J. (jun) (2000). *Matemātika 6.klasei* (Mathematics for 6th grade). Rīga: Zvaigzne ABC (In Latvian)
- 16. Mencis J. (sen), Mencis J. (jun) (2009). *Matemātika 6.klasei* (Mathematics for 6th grade). Rīga: Zvaigzne ABC (In Latvian)
- 17. Milaša I. (2008). Matemātika 6.klasei (Mathematics for 6th grade). Rīga: RaKa (In Latvian)
- 18. Valtasa I., Lude I. (2005). *Matemātika 4.klasei* (Mathematics for 4th grade). Rīga: Pētergailis (In Latvian)
- 19. Plaude I. (2003). Sociālā pedagoģija (Social Pedagogy). Rīga: RaKa (In Latvian)
- Sāne A. (2003). Pilsoniskās izglītības būtība Latvijas kontekstā. Pilsoniskā izglītība un sabiedrības integrācija (Civic education of the Latvian context. Civic education and social integration). Rīga: SIA Artekoms (In Latvian)
- 21. Зуев Д. Д. (1983) Школьный учебник (School textbook). Москва: Академия, р 197-198. (In Russian)
- 22. Подласый И. П. (1996). Педагогика (Pedagogy). Москва: Академия, р 231-233. (In Russian)
- 23. Ситаров В. А. (2004). Дидактика (Didactics). Москва: Академия, р 189. (In Russian)

## STUDENTS' ATTITUDES TOWARDS DEVELOPMENT OF ORAL COMMUNICATIVE COMPETENCE

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**Abstract:** Political, economic, social, and cultural transformations put forward new challenges and requirements for communication in general. As social context lays a stress on effective oral communication, the paper contains the theoretical analysis of communicative competence and the analysis of the results of a survey of students' attitudes towards the importance of communicative competence development. The research was performed in spring 2010 with undergraduate students of humanities and social sciences of Vilnius University Kaunas Faculty of Humanities, Lithuania. Statistical analysis of the data highlights students' attitudes towards their abilities to communicate with job and study partners orally, to speak in public, to apply non-verbal communication. The attempt was also made to reveal the factors that influence the amount of foreign languages that respondents use. A special attention was paid to the students' motivation for further development of their communicative competence.

Keywords: Life Long Learning, Competencies, Oral Communicative Competence.

## Introduction

Political, economic, social, and cultural transformations put forward new challenges and requirements for communication in general. This transformation-based process explicitly aims at the formation of a democratic community while cherishing the personal individuality of every citizen, supporting him/ her with the right to choose political, moral, and economic systems. A changing and unpredictable business environment (Šarkiūnaitė, 2008) creates complicated conditions for organizations' competitiveness. White-coll white-collar employees ar employees consider 'the whole package' of professional image, interactive ability etc. and language being the vehicle in effective performance of tasks in the workplace. In order to achieve this students have to understand the prerequisites for public speech, to be able to analyse the context of a public speech, to prepare and deliver a speech, and to know how to develop an individual style of speaking (Bankauskaitė-Sereikienė, 2008). Thus, the **topic** "Students' Attitudes towards the Development of Communicative Competence" **aims** to reveal the importance of oral communicative competences (LLLC).

The main **objectives** of the research paper are: 1) to define the oral communicative competence; 2) to make an overview of the prior research on communicative competence; 3) to discuss empirical findings of a students' survey.

According to N. Bankauskienė et al. (2008), the current European and national documents on education monitoring point out the importance of a learning paradigm. Learning society provides life long learning conditions to all its members. Members of society always remain in need for a life long education which is provided with the help of communication. They need an ability to communicate with job and study partners in more than one foreign language, prepare business documents, cooperate and collaborate with the learning process participants (Bankauskienė, Bankauskaitė-Sereikienė, Čiučiulkienė, 2008). As career choice process is revealed through oral communication, free talk may be qualified as one of the vital preconditions with the help of which career decision process may be managed. A hypothesis is raised that the students' positive attitude towards integration of the development of career decision making skills and communicative competence shows students' roles to a career counselor and a communicator.

The conceptual framework for the research is the concept of *competence* (Jucevičienė, Lepaitė, 2000; Čiutienė, Šarkiūnaitė, 2004) which is defined as a person's expression or ability to act by individual knowledge, abilities and skills, approaches, features and values. The competence is approached as a holistic unit consisting of minor competencies. According to N. Čiučiulkienė, A. Augustinienė, N. Bankauskienė (2007), 'competences in the competence' enable to describe the

quality of action performed by a person. The list of general (Life Long Learning) competences/ characteristics of abilities is presented in the strategic documents of the EU education on the basis of the Recommendations of the European Parliament and Council (Europos parlamento ir tarybos rekomendacija, 2005). According to Bankauskienė and Staškevičienė (2008), they are necessary for the process of permanent learning of: 1) communication in the mother tongue, 2) communication in foreign languages, 3) mathematical abilities and basic abilities in scientific and technological spheres, 4) digital literacy, 5) learning how to learn, 6) interpersonal, intercultural, social, and civil abilities, 7) entrepreneurship, and 8) cultural expression.

Many of the general LLLC overlap and complement each other. The most important basis for learning is the native language, literacy, numeracy and ICT skills, and learning supports all learning activities. P. Descy and M. Tessaring (2002) while presenting The Second Report on vocational training research in Europe, highlight communication of high quality as the main competence of a 21st century specialist. General communicative competence is most closely associated with communication in the mother tongue (an ability to express and explain one's ideas, feelings and facts orally or in written and communicate in various social and cultural environments). A fully-fledged communicative competence provides the communicative competence. These forms of behaviour facilitate communication between society members, allow solving conflicts, having an effective and constructive participation in society. Communication is a very important part of the Sustainable Education Strategy (Hesseling, 2002). Its main documents point out the importance of self-expression, communication with other people, ability to learn, evaluation of reality, problem solving, initiative and entrepreneurship.

Overview of the relevant previous works. Communicative competence of students was investigated in different ways. M. Wiemann and P. Backlund (1980) while researching the concept of competence in speech communication situations emphasized the basic knowledge of certaincommunication abilities as necessary for adequate functioning in society; they maintain that educators are challenged to devise educational strategies to give students the knowledge and experiential learning necessary to achieve competence in this vital area of their lives. The oral communication ability is thus a fundamental attribute that employers seek in would-be employees. The acquisition of an adequate OCC in at least one foreign language constitutes one of the European educational systems. Despite the relevance given nowadays to the fact of being fluent in more than one EC language, students do not achieve satisfactory levels of competence in foreign languages at the completion of compulsory education (Martínez-Piñeiro, 2002). Most European curricular designs agree that, at the end of the compulsory secondary education, students should be qualified enough to fully develop their oral comprehensive and expressive abilities in a foreign language in everyday situations of social communication. However, huge inequalities in this ability can be currently found among students from different countries. According to E. Martínez-Piñeiro (2002), in view of these differences in OCC, the real acquisition is produced through socio-cultural absorption. That is, the communicative aspect of foreign languages is differently assessed on the social transactions level and on the scholar processes level. W. Huizhao (2001) analyzed a few conventions of traditional foreign language teaching methodology and opened up wide perspectives for the development of the students' competence to use the English language correctly, fluently and appropriately in their future crosscultural communication.

I. Cesevičiūtė (2004) reasoned the concept of a targeted educational environment and provided a model for communication competence training on the aspect of foreign language in the targeted educational environment, which covers the dimensions of context, experience, process, and results. N. Čiučiulkienė (2004) examined problem-based learning educational process and the emancipation of verbal communication in English. The researcher presented the theoretical background of problem-based learning educational process, which would enable emancipation of the spoken English. B. Guo (2008) analyzed the present situation in the secondary school English learning, and reviewed some theories, and their effect on English teaching and learning. The emphasis of the research is on the Social Interactionist Theory and its effect on the students' oral ability in English learning, thus, trying to find a new way to improve students' oral communicative competence. N. Bankauskienė et al., (2008) analyzed engineering students' abilities to evaluate their business communication competence while diagnosing communicative abilities the students already possess or lack. The attempt was made

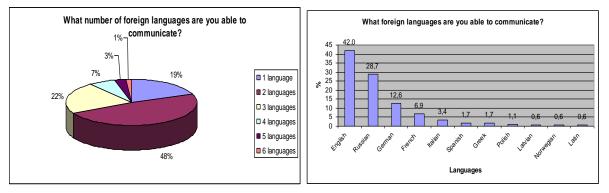
to reveal the factors that influence the development of students' communicative competence in native and foreign languages.

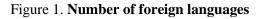
## Materials and methods

**The aim** of the empirical research is to reveal the attitudes of students of undergraduate students of humanities and social sciences towards communicative competence development. **Objectives of the research** are as follows: 1) to analyse the application of OCC; 2) to investigate the options for improving OCC. **The research method.** To reveal students' attitudes towards oral communication competence, an anonymous questionnaire survey was used as the major research method. The questionnaire consisted of three parts and contained open-ended and close-ended questions. The researchers tried to investigate students' theoretical and practical ability to communicate with different partners, asked about students' attitudes towards their abilities to communicate with job and study partners, tried to diagnose respondents' abilities to communicate orally, to speak in public, to apply non-verbal communication. The attempt was made to reveal the factors that influence the development of students' OCC in native and foreign languages. Particular attention was paid to the students' motivation for further development of their OCC. **The sample** of the research (n=75) is 75 students, of which 15 are males and 60 females. The respondents were third year and fourth year philology and social sciences students studying at Vilnius University Kaunas Faculty of Humanities. The survey took place in spring 2010.

## **Results and discussion**

The study included 75 respondents (3rd and 4th year students), of which 20 per cent were men and 80 per cent women. Respondents' age ranged from 20 to 26 years. 70 % of the respondents thought that the future intellectuals need a high communicative competence. It is also evident from their attitudes to language skills (Fig. 1).





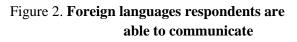


Fig. 1 shows that 48 % of the respondents knew 2 foreign languages, 22 % - 3 languages, 19 % - 1 foreign language. This indicates a high level of communicative competence of the respondents from the viewpoint of language. This fact is confirmed by Fig. 2, which shows data of the foreign languages the respondents know.

## The application of OCC

Further, we will investigate application of OCC aspects in the respondents' practical work. The respondents argued that they are satisfied with their ability to interact with job and study partners (Fig.3)

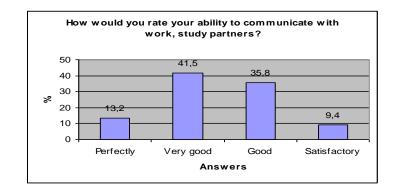
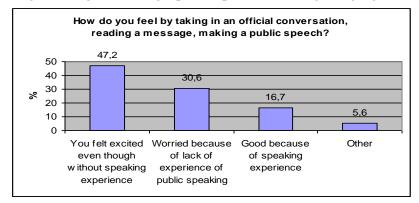


Figure 3. Respondents ability to communicate with job and study partners

41.5 % of the respondents evaluate this ability as very well-developed, 35.8 % as good. This leads to the conclusion that they already have some practical and verbal communication experience, while at the same time suffer from the lack of this experience. For example, 64 % said they have only some public speaking experience. Fig. 4 illustrates how the respondents felt when participating in an official conversation, reading a message or making a public speech in a foreign language.



## Figure 4. Respondents' feelings when participating in an official conversation, reading a message, making a public speech

As we can see from Fig. 4, although the respondents have speaking experience (47.2 %), but felt excited. 30.6 % felt the thrill without speaking experience, they suffered from stress, could not be sincere, hated the speech in front of the audience. It can be concluded that in the field of public speaking students still need to improve their competence and gain more practice.

Further, we will investigate different aspects of the OCC development of the respondents in a greater detail. The respondents were asked whether they feel easy to start a conversation with an unknown person. 60.3 % indicated that they do not always succeed in doing so. Starting the conversation, it is important to pay attention to the co-speaker and to listen to him/her. Fig. 5 shows the feelings of the respondents when listening to the co-speaker.

As we can see from Fig. 5, 68 % of the respondents always look the interviewer into the eyes, 58.7 % - express their opinion dealing with the family, 46.7 % - express their opinion dealing with a lower-rank person, 44 % with peers. It can be argued that the respondents feel more relaxed to communicate at their level and their own circle. Meanwhile, when it is required to communicate with a higher-rank person (84 %), or an unknown person (66 %), or to interfere the conversation (82 %), problems arise. These findings indicate gaps associated with the tolerant talker hearing. 50.7 % of the respondents do not always manage to do so, while for 80 % respondents it is not always possible to fully hear the co-speaker, and they are interfering their speech.

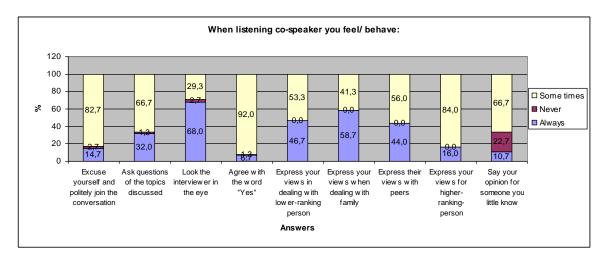
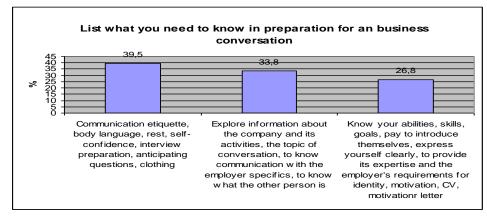


Figure 5. Typical respondents' behaviour when they are listening to a co-speaker

As a positive aspect of the OCC application, a tendency to argue (77.3 %) rarely during communication should be marked. This suggests that students are able to maintain a conversation and listen to someone's opinion, yet, on the other hand, not arguing may be caused by lack of communication skills of the respondents. The latter assertion can be proven by the fact that 45.3 % of the respondents do not have practical experience to properly prepare and conduct a conversation. It also shows that it is very important to improve OCC application of skills. Another positive example of OCC application is the fact that 79.7 % of the respondents can speak in front of the audience when they prepared in advance. This suggests that OCC students have assimilated this aspect and when they know that they have not prepared for the presentation, there would be additional problems: 67.6 % of the respondents say that they are not always able to speak spontaneously in front of the audience. Knowing this fact contributes to the obligatory presentations on various topics during the lecture.

Further, the respondents were asked what they need to know when preparing for a business conversation, e.g. to find a job (Fig. 6).



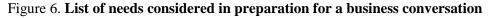
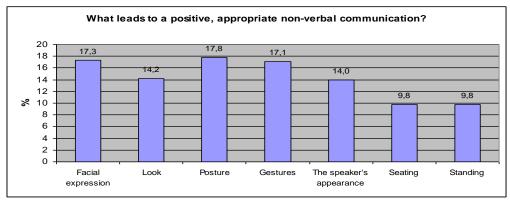


Fig. 6 shows that the respondents (39.5 %) give the priority to communication etiquette, body language, rest, self-confidence, interview preparation, anticipating questions, clothing. Less attention (33.8 %) is given to the information about the company, its activities, the topic of conversation, the specifics of communication with the employer. Even less needed (26.8 %) are abilities, skills, goals, ability to introduce themselves, express themselves clearly, present their expertise and the employer's requirements for an identity, described motivation, CV, cover letter preparation. This suggests that students do not have much job-search experience, these things are mentioned far less relevant for them, but should be of interest for universities, because they have to prepare future employees for companies to engage into their activities successfully and with competence. It should be noted that during the communication not only verbal communication is important, but also non-verbal

communication, which enables to learn many of the other person's reactions to the real situation. This aspect was asked too. The respondents' answers are shown in Fig. 7.



## Figure 7. Aspects which lead to a positive, appropriate non-verbal (verbal) communication

From Fig. 7 we see that during non-verbal communication posture (17.8 %), facial expressions (17.3 %) and gestures (17.1 %) are Important. Much less attention is paid to the speaker's looks (14.2 %) and appearance (14 %). This suggests that respondents perceive the importance of non-verbal language, know about it and, therefore, should improve their non-verbal skills in conjunction with the verbal skills discussed above.

## The options for improving OCC

Further we will suggest possible improvements of the OCC in the respondents activities. As already mentioned above, the respondents use public speaking skills in their practical activities. Fig. 8 shows where they obtained and improved these skills.

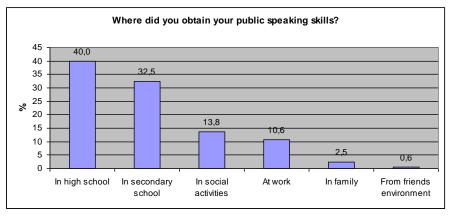


Figure 8. Places of obtaining public speaking skills

From Fig. 8, we can see that public speaking skills of the respondents were mostly formed at secondary school (32.5 %) and then High school (40 %). To a lesser extent public speaking skills can be improved by activities in public life, work, family, friends. The latter two aspects are based on the fact that in the family and in the circle of friends an informal communication dominates and there is no space for public speech development. Only a small proportion of the respondents are engaged in social and work activities. Continuing the idea of public speaking skills learnt in a higher school, the respondents' answers indicate the following disciplines related to public speaking: Oratory, Negotiation language, Information technologies, Rhetoric, Rhetoric basics, Public relations, Common Lithuanian language, Computer communication, English literature, Sociology. Furthermore, the respondents were asked whether they use vocabulary in the practical language. 70.7 % respondents and, in this way, by being able to adjust, learn new and revise already known issues. Mainly dictionaries of international words and related to the Lithuanian language spelling and terms are used. This suggests that during the study relevant aspects for students is correctness of information. Another

question is closely related to this aspect, i.e. how respondents develop their communicative information competence (Fig. 9).

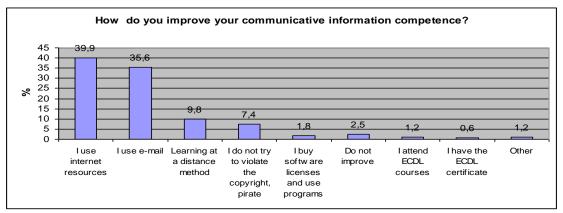


Figure 9. Ways of improving communicative infomation competence

As we can see from Fig. 9, the respondents develop communicative information competence based on using modern information tools - the Internet (39.9 %) and E-mail (35.6 %). This indicates that a very wide range of activities are transferred to the level of information systems, and so they use advanced technologies quite actively, consequently, improving this competence. It is also important to note that for this competence improving distance learning is used and efforts to violate the copyright are made. (compare Šarkiūnaitė, Krikščiūnienė, 2007). It was also asked whether other factors, for example, press, TV shows, radio shows, etc. encourage the respondents' communicative competence development. According to the respondents, the development of this competence is mainly determined by the press, educational programs, textbooks, reference books. This could be related with the above-mentioned factors - the Internet and E-mail use, as both the press and various TV shows are also available via the Internet. Summing up the results, the respondents were asked to suggest some aspects to be considered by higher education schools when teaching communication (Fig. 10).

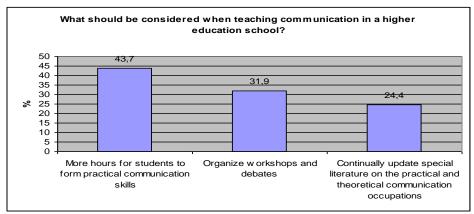


Figure 10. Areas of attention for teaching communication in higher education schools

43.7 % of the respondents think that there should be more hours for developing students' practical communication skills. This means that this process should be related not only to disciplines of communication skills but also to other disciplines which provide the students with an opportunity to make more public speaking, debating and so on. 31.9 % of the respondents believe that it makes sense to organize workshops and debates. The rest of the respondents say that special literature on the theoretical and practical communication occupations should be continually updated to enable self-study?

## Conclusions

The developing learning society inspires Sustainable Development which is impossible without communicative competence.

- Oral communicative competence may be defined as the ability to express one's needs in different social situations while creatively interpreting thoughts, facts and feelings while using various communicative means in native and foreign languages.
- Analysis of the relevant previous works indicates that the minor competence of foreign language training, including both traditional and unconventional methods has been widely investigated. The educational environment of OCC is analyzed. The linguistic communicative competence as the factor of persons' emancipation is examined. There have been attempts to analyze the students' ability to communicate orally and in writing.
- The empirical research findings demonstrate the following aspects of OCC development: future employees are required to have high communicative competence; students already have some practical and verbal communication experience, while at the same time they lack this experience (suffering stress, feeling unable to be sincere, hate speech in front of the audience); respondents feel more comfortable to communicate in their social circle, but when it is required to communicate with a higher-rank person or an unknown person, or to interfere the conversation, problems arise; the respondents do not have practical experience to properly prepare and conduct the conversation when preparing for a business conversation such as a job interview the respondents' priorities include communication etiquette, body language, rest, self-confidence, interview preparation, anticipating questions, clothing; respondents perceive the importance of non-verbal language, know about it and, therefore, feel a need to improve their non-verbal skills in conjunction with verbal skills; the respondents develop communicative information competence by using modern information tools such as the Internet and E-mail. This indicates that a very wide range of activities are transferred to the level of information systems, and so advanced technologies have much potential to help young people to improve their competence.

## References

- Bankauskienė N., Bankauskaitė-Sereikienė G., Čiučiulkienė N. (2008). Communicative Competence Development in Engineering Education. International Conference Proceedings. *Global Cooperation in Engineering Education: Innovative Technologies, Studies and Professional Development*. Kaunas: Technologija, p. 131-138.
- 2. Bankauskaitė-Sereikienė G. (2008). *Oratorystės menas*. (Oratory art). Vilnius, Vilniaus universiteto leidykla. (In Lithuanian)
- Bankauskienė N., Staškevičienė V. 2008. Development of the European Competencies as a Presumption for the Successful Integration of Engineers into Labour Market. International Conference Proceedings. *Global Cooperation in Engineering Education: Innovative Technologies, Studies and Professional Development*. Kaunas: Technologija, p. 96-107.
- 4. Cesevičiūtė I. (2004). Specific aspects of a targeted educational environment for the development f students communicative competence at university their manifestations in the dimensions of context and background. *Socialiniai mokslai*, nr. 2 (44), p. 82-94.
- 5. Čiučiulkienė N., Augustinienė A., Bankauskienė N. (2007). Explicit teaching discourse as the expression of the contemporary teachers' competencies. *Pedagogika*, nr. 87, p. 42-48.
- Čiučiulkienė N. (2004). Problem-based learning as the educational process emancipating the verbal communication in English. Summary of the doctoral dissertation. Social Sciences, Educational Science (07 S). [online] [11.09.2011]. Available at <a href="http://info.smf.ktu.lt/Edukin/failai/disertacijos/ciuciulkiene\_dissertation.pdf">http://info.smf.ktu.lt/Edukin/failai/disertacijos/ciuciulkiene\_dissertation.pdf</a>
- 7. Descy P., Tessaring M. (2002). *Training and learning for competence. Second Report on vocational training research in Europe: executive summary*. Luxembourg: Office for Official Publications of the European Communities.
- 8. Guo B. (2008). Developing Students' Oral Communicative Competence through Interactive Learning. *Asian Social Science*, <u>Vol 4, No 1.</u> [online] [11.09.2011]. Available at <u>http://www.ccsenet.org/journal/index.php/ass/article/view/2091</u>

- 9. Hesselink F. (2002). The role education and communication can play when dealing with issues of sustainable development. *Communication, Education & Public Awareness towards Participation Sustainable Development, First International Conference on Public participation of the Asia-Europe Meeting, Bangkok, 10-12 June 2002.* [online] [13.09.2011]. Available at www.hect.nl/.../Article Public participation 4.pdf
- Huizhao W. (2001). The Student centered Topicbased Approach and the Development of Communicative Competence. <u>Foreign Languages and Their Teaching. 2001-04</u>. [online] [11.09.2011]. Available at <u>http://en.cnki.com.cn/Article\_en/CJFDTOTAL-</u> <u>WYWJ200104011.htm</u>
- 11. Jucevičienė P., Lepaitė D. (2000). Kompetencijos sampratos erdvė. (The use of Quality). Socialiniai mokslai, nr. 1 (22), p. 44-50. (In Lithuanian)
- 12. Martínez-Piñeiro, E. (2002). Oral Communicaitve Competence in English Language at the Complexión of Compulsory Education. Level of Achievement and Conception of Galician Communtty Students. *Educational Research*. [online] [11.09.2011]. Available at <a href="http://cvc.cervantes.es/literatura/cauce/pdf/cauce25/cauce25\_24.pdf">http://cvc.cervantes.es/literatura/cauce/pdf/cauce25/cauce25\_24.pdf</a>
- Čiutienė R., Šarkiūnaitė I. (2004). Darbuotojų kompetencija organizacijos konkurencingumą lemiantis veiksnys. (Staff expertise - the factors of organization's competitiveness). *Ekonomika*, t. 67(2), p. 18-26. (In Lithuanian)
- Europos parlamento ir tarybos rekomendacija dėl bendrųjų visą gyvenimą trunkančio mokymosi gebėjimų (2005). (European Parliament and Council Recommendation on key competences for lifelong learning). Briuselis. 10.11.2005 KOM (2005/0548, galutinis 2005/0221(COD). (In Lithuanian)
- 15. Šarkiūnaitė I. (2008). Employees' communication in organization: it influence aspect. <u>Continuous optimization and knowledge-based technologies: 20th EURO Mini conference</u> <u>(EurOPT-2008), May 20-23, Neringa, Lithuania. Vilnius: Technika, p. 410-415.</u>
- Šarkiūnaitė I., Krikščiūnienė D. (2007). Influence of Virtual Environment on a Human Factor within the Virtual Teamwork. *Transformations in Business and Economics*, vol. 6, no. 2, suppl. A, p. 219-234.
- 17. Wiemann J. M., Backlund P. (1980). Current Theory and Research In Communicative Competence. Review of Educational Research. Spring, vol. 50 no. 1, p. 185-199.

## EDUCATION SYSTEM IN LABOUR PROTECTION IN THE REPUBLIC OF LATVIA

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**Abstract:** The legislation of the Republic of Latvia sets out certain educational requirements the employees working as labour protection specialists or those providing labour protection services shall have. Although the education system in labour protection is clear and transparent, there are still some problems, which are mainly connected with educational succession. Reflection of personal experience and analysis of legislation will be used as research methods.

Keywords: work safety, education, knowledge, continuity of education.

#### Introduction

As the inclusion in the European Qualifications Framework for lifelong learning (EQF) is taking place, the Latvian education system has entered a new phase of development aimed at promoting lifelong learning and facilitating transnational mobility of employees (Recommendation of the European Parliament..., 2008; Referencing of the Latvian Education System..., 2011). Thus Latvian citizens will have a better understanding about education systems in their own country and other countries and also qualification certificates aligned to the EQF. It will also facilitate international recognition of qualification documents acquired in Latvia both for studies and employment.

Following the EQF the results of studies, knowledge, skills and competences obtained during a study process are determined in study programmes. In order to facilitate the formation of the description of comparable knowledge, skills and competences in the European countries and Latvia, Bloom's Taxonomy of Learning Domains is used widely (Bloom, 1956; Harrow, 1972; Kennedy, Hyland, Ryan, 2006; Krathwohl, Bloom, Masia, 1973). Thereby, an employer will have a better understanding about the applicant's qualification level, as well as receive information about the applicant's knowledge, skills and competences. The applicants will also identify learning outcomes in each educational programme and each of its components easier, so that the programmes would be used more purposefully for professional or personal development within the framework of lifelong learning. The EQF stresses the importance of harmonization of programmes at all levels to ensure continuation of studies, compliance with the laws and regulations and labour market requirements.

The aim of the research is to assess the connection of qualification levels of labour protection specialists and corresponding educational programmes with the legislative acts as well as the measures necessary to ensure the continuation of the studies

#### Materials and methods

The research is based on the author's experience working in the field of labour protection while running the study programme "Labour Protection and Safety" at Latvian University of Agriculture (LUA), and running study courses in labour protection at Riga International School of Economics and Business Administration (RISEBA), in vocational in-service training on labour protection in Dobele Adult Education Centre and at the Lifelong Learning Centre at Latvian University of Agriculture (LUA). In order to explore the problem more profoundly, the analysis of legislative acts applicable to labour protection and higher education was carried out. There have been several interviews with the teaching staff and students at Latvian University of Agriculture (LUA) and Riga International School of Economics and Business Administration (RISEBA):

- Labour protection and safety (LUA)
- Labour protection (RISEBA)

## **Results and Discussion**

Education in labour protection like all educations consists of several levels. Regulations of the Cabinet of Ministers of the Republic of Latvia on providing training in labour protection require a two-level education (Training Procedure in Labour Protection, 2010):

- vocational in-service training,
- vocational education:
  - first-level higher education;
  - second-level higher education.

Such education system is required since the companies and institutions working in different fields have different labour protection requirements.

Regulations of the Cabinet of Ministers on commercial activities, in which an employer shall involve competent authorities, determine the cases when competent authorities or labour protection specialists having professional first or second level higher education shall be involved. (Regulations regarding the Types of Commercial Activities..., 2009). It is not appropriate to list sectors and types of commercial activities requiring the above mentioned specialists, so we will mention only those types that have not been mentioned in those requirements.

- Retail.
- Real estate activities.
- Tourism.

In all other types of commercial activities it is necessary to involve labour protection specialists having the first or second level higher professional education.

These regulations also determine the number of employees. An employer may be refraining from involving competent authorities or competent labour protection specialists, if the number of employees does not exceed five people.

Internal monitoring of the working environment can also be performed by specialists having basic education in labour protection, which can be acquired vocational in-service training programme.

Table 1

## Rights to Perform Internal Monitoring of Working Environment for a Person Having Basic Education

	A 1-b				
	A labour protection specialist if more than ten people are employed.				
	A labour protection specialist if the type of commercial activity is not mentioned in the				
	Regulations of the Cabinet of Ministers regarding types of commercial activities, in				
Basic	which an employer involves a competent authority. (Regulations regarding the Types				
education	of Commercial Activities, 2009). The number of employees is not limited.				
in labour	A labour protection specialist, being also an employer or a manager of the company,				
protection	included in the Regulations of the Cabinet of Ministers regarding the types of				
	commercial activities in which an employer involves a competent authority				
	((Regulations regarding the Types of Commercial Activities, 2009). The number of				
	employees does not exceed five people.				

Training centres provide vocational in-service training. The programme includes 160 lessons. It consists of a theoretical course and practice. The following study courses are included in the programme for vocational in-service training.

- Legal relationships of employment.
- Organization of labour protection.
- Occupational health and safety.
- Introduction to electrical safety.
- Introduction to fire safety.
- First aid in occupational accidents.
- Practice in a commercial company, public organization, state or municipal institution.

A person having basic education can obtain vocational in-service training. People who have acquired basic course in labour protection can do work listed in Table 1. (Regulations regarding types of Commercial Activities..., 2009; the Labour Protection Law, 2002).

Currently, it is possible to acquire the first-level higher education in labour protection in the Republic of Latvia at the universities mentioned in Table 2.

Table 2

## Higher Education Establishments in Latvia Providing the First-level Higher Education in Labour Protection

Obtainable qualification	Higher education establishment	Programme code
	Riga Teacher Training and Educational Management Academy	41862
Labour protection	Riga International School of Economics and Business Administration	41862
specialist PS 0096	Riga Higher School of Pedagogics and School Management, Alūksne Branch	41862
PK 3119 04	Riga International School of Economics and Business Administration, Daugavpils Branch	41862

As you can see above, four universities in the Republic of Latvia provide the second level higher education. (Table 3) The underlying problem in education is that none of the universities provide continuity in education; it is not possible to continue the first level higher education, because terms of enrolment to all higher education establishments require a bachelor's degree or the second-level higher education, which is determined by the first two digits of educational qualification code, in this case it is 46.

Table 3

#### Higher Education Establishments in Latvia Providing Second-level Higher Education in Labour Protection

Obtainable qualification	Higher education establishment	Obtainable degree	Programme code
Senior	Latvia University of Agriculture	No	46862
specialist in labour	University of Latvia	Professional Master's Degree in labour protection	46862
protection PS 0100	Riga Technical University	Professional Master's Degree in labour protection	46862
PK 2263 01	Daugavpils University	Professional Master's Degree in labour protection	47862

The levels of EQF envisage that higher education refers to Levels 5 -8 of EQF. Level 5 of EQF refers to the first level professional higher education programmes (college education). Level 6 of EQF includes academic and professional bachelor's study programmes, as well as higher professional education programmes, Level 7 of EQF – academic and professional master's programmes, as well as higher professional education programmes, while Level 8 of EQF refers to doctoral study programmes. (Referencing of the Latvian Education System of the European Qualifications Framework..., 2011) In professional higher education there is another programme division beside bachelor and master's programmes:

- First level professional higher education (college) study programmes, when completing this programme according to division of levels used in Latvia, you obtain the fourth level professional qualification. The value of the programme is 80 120 CP (120-180 ECTS credit points), and they are mainly necessary to acquire a profession, but their graduates can continue their studies in the second level professional higher education programmes.
- The second level professional higher education programmes, when completing this programme according to division of levels used in Latvia the fifth level professional qualification is obtained. After receiving bachelor or master's degrees, the value of the

programme is at least 40 CP (60 ECTS credit points) or at least 160 CP (240 ECTS credit points) after obtaining secondary education. In both cases, the programmes should include a practice providing at least 26 CP (39 ECTS) and state examination (including a diploma paper) giving at least 10 credits (15 ECTS credit points). If the 240 Latvian CP programme includes a compulsory part of a bachelor's programme, the graduates get access to master's studies. (Referencing of the Latvian Education System of the European Qualifications Framework..., 2011)

Regulations of the Cabinet of Ministers regarding training in labour protection matters (Regulations regarding Training..., 2003, Paragraph 12) stated that the second level professional higher education shall be acquired on the basis of higher vocational or academic education acquired earlier in the fields of natural sciences, engineering or health protection. (Table 4) Currently these rules have lapsed, but the universities providing a diploma of professional master's degree along with higher vocational qualification diploma cannot change the terms of enrolment and meet the requirements of the Cabinet of Ministers regarding training procedures in labour protection which states that the second level professional higher education shall be implemented on the basis of higher professional or academic education acquired earlier. (Regulations Regarding Training in Labour Protection Matters 2003, Paragraph 5)

Table 4

Requirements regarding taking up studies to a	acquire second-level higher education in labour			
protection				

Higher education establishment	Previous education, requirements	ІКК
Latvian University of Agriculture	Higher education	46862
University of Latvia	Bachelor's degree, the second level professional higher education in natural sciences and engineering or the equivalent university degree; or bachelor's degree in other fields with at least two years experience in labour protection or environmental protection or or the equivalent university degree.	46862
Riga Technical University	The second-level higher professional education in labour protection or environmental protection; professional bachelor's degree and engineer's qualification or engineer's qualification obtained after studying in at least a four year study programme and two years practical work experience in labour protection, and the second-level higher education in chemistry, physics, manual training and legal sciences which has been obtained while completing studies at a four year programme and at least two years practical work experience in labour protection.	46862
Daugavpils University	Bachelor's degree or the second-level higher professional education in labour protection, environmental protection or engineering; bachelor's degree in physics, chemistry, environmental or engineering sciences or higher vocational education in physics, chemistry, environmental sciences or engineering; bachelor's degree or the second-level higher professional education or the equivalent university degree in natural sciences, mathematics, computer science, health care and at least one year working experience in labour protection	46862

Latvian University of Agriculture is the only university, which, starting with the next academic year, will enroll entrants having the first level higher education in the study programme "Labour protection and safety". Now application has been submitted to the Higher Education Quality Evaluation Centre to change the IC code from 46862 to 48862, which allows enrolling entrants with the first-level higher education. The first two digits of the IC code means that the code is unifying and includes all codes from Group 4.

This code does not exist yet, but in the near future will be introduced. The continuity of education will be achieved in this way, and people who have obtained first level of higher education in labour protection will be able to continue their studies and improve their skills thus acquiring new knowledge, skills and competences. However, there is a problem for all first-level higher education programmes in labour protection – the obtainable number of credit points is 80CP, the obtainable number of credit points in the second-level study programme in labour protection and safety at LUA is 70CP, which makes 150 CP together and it is insufficient to acquire the second level higher education. The total number of acquired credit points has to be 160CP.

The solution for this situation could be amendments to the Law on Institutions of Higher Education, where in Section 59.<sup>2</sup> Paragraph 5 "Studying beyond study programmes" is stated that a university or a college shall evaluate a person's study results achieved while studying in previous education programmes or obtained during vocational experience and, if they meet the requirements set forth in a respective study programme, they should be recognized and given the appropriate number of credit points. Study results achieved in vocational experience may be recognized in professional or academic study programmes. People, whose number of credit points is smaller than 90 CP when entering the university, must have undergone vocational in-service training in labour protection, and this is a compulsory requirement. The volume of this education is 160 hours, which also makes the missing 10CP (Law on Higher Education, 1995)

Table 5

Senior labour protection specialist	Labour protection specialist				
(Second level higher education)	(First level higher education)				
Basics of employment rights	Basics of employment rights				
Labour protection and related laws and	Labour protection and related laws and				
regulations	regulations				
Environmental protection and related laws and					
regulations					
Basics of management studies	Management studies				
Safety of manufacturing technologies	Safety of manufacturing technologies				
Risk factors of work environment, their	Risk factors of work environment, their				
identification, measuring and assessment	identification, measuring and assessment				
Sub-branches of labour protection	Sub-branches of labour protection				
Safety measures at work (collective, individual)	) Safety measures at work (collective, individual)				
Basics of occupational health un occupational	Basics of occupational health un occupational				
medicine	medicine				
Basics of work psychology					
Basics of work ergonomics	Basics of work ergonomics				
Application of computer sciences in labour	Basics of computer sciences				
protection					
Basic of business economics					
Storage of hazardous substances (chemical etc.)					
and safety measures					
Pedagogy					
Education psychology					

**Requirements of Professional Standard Determining the Structure of Obtainable Knowledge** 

As you can see in Table 5 a number of requirements match both the first and second level studies. Pedagogical and psychological studies are not included in the first level of professional education, although the graduates of the first level of higher education will be dealing with employee instruction in labour protection. Only senior labour protection specialists have a right to provide services in the field of labour protection, which usually does not include instructing employees.

### Conclusions

- Development and Implementation of Latvian Related Qualifications Framework to the European Qualifications Framework has activated the perfection of education programmes.
- Currently in the Republic of Latvia educational continuity in labour protection by moving from the first level higher education to the second level study programme is not possible. Education in labour protection can be acquired only to a master's degree to Level 7 of EQF. The introduction of EQF contributes to ensuring continuity of education in labour protection.
- To be able to enrol the graduates of the first level study programmes into the second level, vocational in-service training in labour protection could be a necessary requirement.
- To ensure the continuation of the studies starting with the next academic year, labour protection specialists having the first level of higher education in labour protection can continue their studies at LUA in a study programme "Labour Protection and Safety".

### References

- 1. *Apmācības kārtība darba aizsardzībā*. (2010) (Training system in labour protection). Latvijas Republikas 2010 gada 10 augusta Ministru kabineta noteikumi Nr. 749 [online] [20.11.2011]. Available at <u>http://www.vdi.gov.lv/files/osha/MKnot\_749\_apmaciba\_2010.pdf</u> (In Latvian)
- 2. *Augstskolu likums* (1995) (Law of Higher Education) [online] [20.11.2011]. Available at <u>http://www.likumi.lv/doc.php?id=37967 (In Latvian)</u>
- 3. Bloom, B.S. (1975) Taxonomy of Educational Objectives, Book 1 Cognitive Domain. Longman Publishing.
- 4. *Darba aizsardzības likums*. (2002) (Law of Labour Protection) [online] [20.11.2011]. Available at <u>http://www.vdi.gov.lv/files/osha/dal\_ar\_groz\_2010.doc</u> (In Latvian)
- 5. Kennedy D., Hyland A., Ryan N. (2006) Writing and Using learning Outcomes: a Practical Guide.
- Noteikumi par apmācību darba aizsardzības jautājumos (2003) (The rules of training in labour protection). Latvijas Republikas 2003 gada 17jūnija Ministru kabineta noteikumi Nr. 323[online] [20.11.2011]. Available at http://www.likumi.lv/doc.php?id=76541 (In Latvian)
- Noteikumi par komercdarbības veidiem, kuros darba devējs iesaista kompetentu institūciju (2009) (The rules of business activities in which the employer enlists competent authorities) Latvijas Republikas 2005 gada 8 februāra Ministru kabineta noteikumi Nr. 99 [online] [20.11.2011]. Available at http://www.vdi.gov.lv/files/osha/mknot\_99\_komercd\_ar\_groz\_2009.doc (In Latvian)
- Recommendation of the European Parliament and of the Council of 23 April 2008 on the Establishment of the European Qualifications Framework for Lifelong Learning. (2008).
   [online] [15.03.2011]. Available at: <u>http://eur-</u> lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:111:0001:0007:EN:PDF
- Referencing of the Latvian Education System to the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area. Self-Assessment Report. (2011). Academic Information Centre, Rīga, Latvia, 137 p. [online] [20.11.2011]. Available at <u>http://www.nki-latvija.lv/wp-content/uploads/2011/09/Latvian-Self-Assessment-Report-2nd-version.pdf</u>

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# EXEMPLARY STUDIES AS A MEANS OF DEVELOPMENT OF STUDENTS' PROFESSIONAL COMPETENCE IN THE COURSE OF GEODESY

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**Abstract:** The study is designed with the aim to assess the usage of the principles of exemplary studies and students evaluation of the development of professional competence in the course of geodesy. The principles: genetic, dialogical and exemplary are analysed in laboratory works and outside the university environment. The didactical model of geodesy was used to develop students' professional competence. The findings are analysed within the frame of the geodesy course programme for the land survey speciality first year students. The method of questionnaire was used to investigate the students' self-evaluation on the development of their professional competence of geodesy. The main conclusion of the study is that exemplary studies improve specific professional, social and cultural skills, critical and analytical thinking.

Keywords: the course of geodesy, exemplary studies, professional competence.

### Introduction

Teaching exact sciences is a problem because of students' analytical thinking difficulties and knowledge usage in practice in various settings (inside university: lectures and laboratory works, study practices; outside university: professional (field) practices, internet, local authorities). It means constant revision of teaching practice and looking for new aspects. One of them is genetic learning brought forward by German scientist, educator, mathematician, and physicist Martin Wagenschein (1896–1988) and recognised particularly in natural sciences. The principles of genetics, dialogue and exemplary help to cope with large quantity of information promote critical and analytical thinking and understand totality in relevance with the subject matter of the course and science development of the age. The usage of the principles is widened and related to the following environments: laboratory works, internet, study and professional (field) practices and local authorities.

Geodesy course programme for the land survey speciality students of Latvia University of Agriculture (LLU) is chosen as an example for demonstrating the exemplary studies principles usage at higher education institution. The course of geodesy content has been revised according to the principle of exemplary in two year period. The course delivering didactics is being developed considering the principles of genetics, dialogue and exemplary by means of the didactical model of geodesy.

### Materials and methods

History of genetic learning relates to the theory of recapitulation. The term 'recapitulation' Darwin (1964) used already in 1859. Haeckel in 1866 defined biogenetic law (initially in German 'Biogenetisches Grundgesetz', *later* 'Biogenetische Grundregel', in English 'theory of recapitulation', 'embryological parallelism'). The essence of the law - ontogeny recapitulates phylogeny (Scott, 2006).

Darwin's theory of evolution and Haeckel's recapitulation theory had an impact on Hall's explanation of psychological development up to adolescence mainly in terms of the biological theory of recapitulation (Hall, 1904). Hall basically argued that every developing adolescent 'recapitulated' the cultural history of the human race. Scott (2006) mentions that even more than in biology, Haeckel's biogenetic law was adapted uncritically by many of social sciences. Getting knowledge will be true to nature, i.e. following humans historically cultural development (Pólya, 1981).

Wagenschein describing learning as a genetic process used the term *genetic learning* (genetische Lernen) with the following features: usage of bright phenomena (subjects, events, phenomena) and expositions; presence of reality; presence of emotions, motivation and adventure (Wagenschein, 1999, 75). Genetic learning means finding out basic principles of a definite theme and then use them for discovering further coherencies.

Genetic learning involves three basic principles: genetic, Socratic (dialogic), exemplary. The basis of the genetic principle is that the teaching/learning course develops on the ground of problems which developed historically. Wagenschein explained the meaning of genetic learning that it place pupils in a situation where an intelligible problem manifests itself in thus it was for mankind when it was not able to solve it (Wagenschein, 1968, 14).

As regards the students of geodesy genetic learning means involvement them into discovery of the theme with insight into its basics/history, link it together with nowadays theory, practice and ordinary concepts and use the knowledge got for discovering further coherencies. Petrik (2004) comments the process of discovery as a success of the genetic principle. Petrik (2004) also stresses Wagenschein's idea that the genetic principle helps to learn how to systematize things and to avoid learning of definite knowledge by heart without real understanding their sense and impact on other phenomena.

The didactical model was made as a means of implementation genetic learning with the purpose to develop students' professional competence starting from the first year of studies. The model helps to deliver the course of geodesy as well as to valuate results.

The questionnaire on the development of students' professional competence was had been carried out. The questionnaire of the course of geodesy was designed for longitudinal researches in several higher education institutions.

Siniscalco and Auriat (2005) describe guidelines for writing questions as keeping the vocabulary simple and the questions short, avoiding of: double-barrelled, hypothetical questions and double negatives, overtaxing of the respondent's memory and overlapping response categories.

Cohen and Manion (1994, 96) mention that questionnaires should encourage respondents to cooperate and they have to be easy and attractive. They also comment on Moser and Calton's conclusion that central tasks in the questionnaires editing are completeness, accuracy and uniformity (Cohen, Manion, 1994, 101).

A well-known method of data triangulation (Haasbroek, 1968) is used gathering them through several sampling strategies. So the data at different times, social situations, and on a variety of people are gathered (Denzin, 1970). The data are gathered in three groups of respondents in different times of the particular study.

Surveys on the development of students' professional competence in the studies of geodesy, delivering of the study course *geodesy*, etc. were carried out in three years period from 2008/2009 to 2010/2011. Totally 232 students were questionnaired (Table 1), i.e. 117 – from Latvia University of Agriculture (LLU), 49 – Riga Technical University (RTU), 40 – Moldova Agricultural University (MAU) and 26 – Czech University of Life Sciences (CULS).

Distribution of four statements in each question is the following: 4 – agree, 3 – moderately agree, 2- moderately disagree, 1 – disagree.

### **Results and discussion**

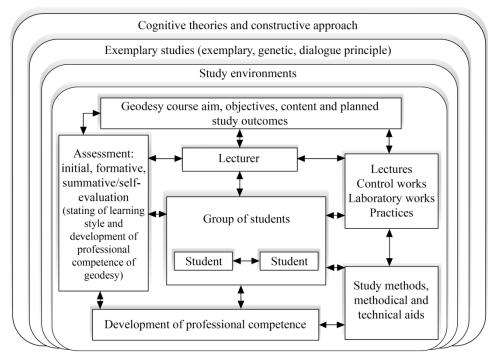
The didactical model of geodesy studies is focused on student centred approach. It means that the students, a lecturer and competence development process makes the core of the model. Studies are the process of constructive interaction and co-operation among the students and the lecturer.

Cognitivism theories and constructivists cognitions make the theoretical basis of the model. Emphasis of study environments/settings, unity of the geodesy course aim, objectives and outcomes, substantiated choice of the course delivery methods and content as well as types of valuation (lecturer assessment, student mutual evaluations, self-evaluation) make a systemic device where all elements are used and mutually interact (Fig. 1.).

Novelty of the model (Fig. 1.) is the following:

- integrate all the elements of geodesy course delivery elements (comprising the course aim, objectives, outcomes, content, teaching/learning methods, valuation methods, study environments/settings) in a system with student and a lecturer's cooperation in the centre of the model with the purpose to improve getting of profession competence of geodesy;
- arrangement of the content of geodesy according to the principles of exemplary studies (exemplary, genetic, dialogue principles);

• the model is implemented in various environments and the implementation is based on the three principles of exemplary studies.



#### Figure 1. Didactical model of geodesy studies

The course of geodesy is delivered only for the first year students and many other courses and practices are linked with it. The amount of the course of geodesy is 128 academic hours (25% of time is lectures and 75% - laboratory works). Students also have an independent work at home and library for carrying out practical home assignments, preparing for control works, tests and exams. The length of the study practices related to the course of geodesy during the first year is two weeks, second year – three weeks, third year – two weeks. The length of the professional (field) practice during the second year is three weeks.

Exemplary studies are implemented in the course of geodesy for the first year students, and its principles are used in senior courses as well. The geodesy course programme for the land survey speciality first year students starts in the first semester according to the syllabus. They are distributed into laboratory work groups. Contact hours are arranged as follows: lectures for all groups together are delivered by one lecturer but each laboratory work group work under the guidance of three individual lecturers.

#### Laboratory works

The principle of exemplary in geodesy course studies became topical mainly because of the discrepancies in time limit and quantity of material which should be taught. The time limit created serious problems of the quality of the programme completion, and it is the first problem in the study process. Students do a lot of independent work in theory using various sources. As regards laboratory works they have to do them in laboratories and they are planned parallel lectures.

The second problem in relation to the curriculum planning is the following: successful carrying out of laboratory works is based on theory which should be delivered and comprehended during lectures. The lectures are delivered for all the target student groups simultaneously but laboratory works are organised in different times and it makes the sequence theory-practice more complicated.

Considering the author's I. Bīmane long years' experience in geodesy course delivering it is possible to assert that one of the best problem solutions is the usage of exemplary studies arranging the themes according to the principle of exemplary. It means focussing on particular exemplars versus traditional themes sequence in a text-book in laboratory works planning (Fig. 2).

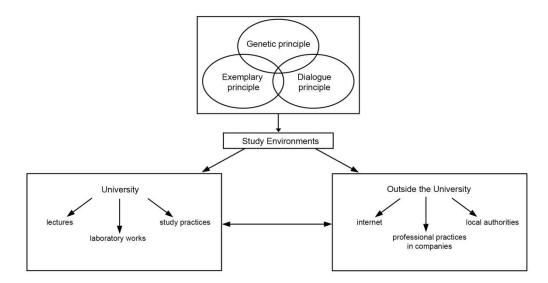


Figure 2. Exemplary studies principles in various study environments

Depending on an assignment, students carry out laboratory works in small groups or individually. Students accomplish analytically graphical tasks individually, hereto each students has a distinctive version. Needed theory and the process of the assignment accomplishing is talked and repeated before a running work, hereto the students are motivated to engage in a dialogue with a lecturer. It is very important to be a skilled assessor of the result, e.g. exactness of measuring or completion of necessary controls of analytical tasks. That is a way for students to develop their logical and critical thinking.

Works where geodesy instruments are used students accomplish in groups of three or four. The participants of the groups can be changed by the students' choice next time. Every student writes a report on the works accomplished and submits to a lecturer a completed calculation or graphic work which is also a basis of the work acceptance.

As regards lecturers they help students and have the role of advisers and promoters in the process of doing laboratory works and particularly with instruments. Results are recorded in special journals and the lecturer confirms them with a signature.

The sequence of laboratory work themes were arranged according to the principle of exemplary choosing exemplars (focal themes). They were chosen considering the features of totality, historical and scientific coherencies, and interdisciplinary. Other themes are grouped around the exemplars.

It is very important to understand the entirety of the course of geodesy in the process of its acquiring because the geodesy works is the whole complexity. Its peculiarity is in actions sequence and the actions are not possible apart by themselves at the same time. Measuring is possible only by means of geodesic instruments therefore students learn their construction, testing, history of instruments production and get to know about nowadays advanced instruments and technologies. Here arise the rest features of genetic learning: acquiring of the course getting knowledge also about the development of humanity and culture, holism and humanistic values. Students comprehend that their knowledge will be a means for meeting both an individual and society needs. The students are motivated to think critically in the course of geodesy, to participate in a dialogue actively and find out solutions in the case of problems appearance.

### Study practice

The study practice is planned at the end of the first study year after completion of the course of geodesy.

Students organize groups of five or six participants in each by their choice at the beginning of a practice. The students do not change the groups during the practice. A leader of each group is responsible for all the work organization and discipline during the practice. The accomplishment of the practice tasks is a shared work therefore the practice documentation is only one copy per group. The entire group defends the practice results which are evaluated both by the students and a practice

leader (a lecturer). Actually the practice mark is got considering both the practice leader and the students' assessment.

The following criteria and their features are realised during the practice: genetics (problem based learning, interdisciplinary of mathematics and optics), exemplary (exemplars of classical measuring and the most common situations topographic measuring), dialogical (the students develop critical thinking; expose and substantiate ideas and come to solutions; respect and keep personal autonomy and clarity of each participant's individual contribution; listen attentively with the purpose to understand others; find out new possibilities and alternatives in the process of assignments accomplishment; recognise their shortcomings of knowledge and skills).

#### Professional (field) practice in companies

Students are required to complete three weeks in summer after the second year of studies in land surveying companies.

The aim of the practice experience is to promote the professional development of students by providing opportunities to apply theoretical knowledge and skills get in laboratory works in land surveying fields.

The objectives are: to get acquainted with work environment in the companies of land surveying, develop working skills with progressive geodesy instruments, carry out topographic, geodesic and mapping and other works under the guidance of experienced specialists and to develop ability to work in teams.

Inductive approach in the learning process is activated during the practice because students get experience on the basis of real practical assignments. The students work as surveyors assistants and they are in a new setting during the practice. It means new work assignments, time, space and interpersonal relations. There is the change of the status from a student to a new and less experienced colleague, and the students have to implement their knowledge and skills in collaboration with experienced colleagues.

The major part of students meets their future professional colleagues including also company managers for the first time just during the professional practice. They are potential employers. The practice co-ordinator from the side of the company writes a report at the end of the practice. The report comprises such items as: the student's attitude towards work, kinds of assignments, quality of the assignments' completion. Each student prepares a report of the practice and defends it in the presence of other students and two lecturers.

The following principles and their features are realised during the practice: genetics (problem based learning - students together with professionals try to find the most appropriate solution of the assignment, interdisciplinary of mathematics and optics and maintaining and testing of geodesy instruments), exemplary (the students learn to use knowledge and skills into new cases), dialogical (the students under the guidance of the practice co-ordinator develop critical thinking; expose and substantiate ideas and come to solutions; respect and keep personal autonomy and clarity of each participant's individual contribution; listen attentively with the purpose to understand others; find out new possibilities and alternatives in the process of assignments accomplishment; respect other settings; recognise their shortcomings of knowledge and skills).

### Internet

Students use Internet looking for additional information both in theoretical and practical parts in the course of geodesy. They also use Internet with the purpose to find out information on changes in normative documents which regulate topographic and geodesy works.

Genetic principle dominates in Bachelor theses writing widely discovering the theme starting from history and basics and linking them together with nowadays science. The feature of interdisciplinary is apparent preparing theoretical and practical assignments.

Table 1

Stuc	Students' self-evaluation on the development of their professional competence of geodesy										
							onses, n				
No.	Question	Responses*	1 <sup>st</sup> year	3 <sup>rd</sup> and 4 <sup>th</sup> years	RTU	CULS	MAU	n	%	Mode	Median
1	Does the study course <i>geodesy</i> teaching promote your co-operation with other students and teachers?	$\begin{array}{c} 4\\ 3\\ 2\\ 1 \end{array}$	32 23 3 -	29 22 8 -	25 21 2 1	5 15 3 3	22 11 5 2	113 92 21 6	49 40 9 2	4	3
2	Does the study course <i>geodesy</i> teaching promote your understanding on your career in the field of land survey?	4 3 2 1	42 14 2 -	35 15 7 2	30 16 3 -	- 10 10 6	27 8 4 1	134 63 26 9	58 27 11 4	4	4
3	Does the study course <i>geodesy</i> learning promote your understanding on duties in the field of land survey?	$\begin{array}{r} 4\\ 3\\ 2\\ 1 \end{array}$	39 19 -	$\begin{array}{r} 30\\22\\4\\3\end{array}$	23 22 4 -	1 14 8 3	19 17 2 2	112 94 18 8	48 40 8 4	4	3
4	Does the study course <i>geodesy</i> learning promote your understanding on professional values and professional ethics?	4 3 2 1	19 32 6 1	18 30 9 2	14 26 8 1	2 12 5 7	19 10 6 5	72 110 34 16	31 47 15 7	3	3
5	Does the study course <i>geodesy</i> learning promote your skill to think coherently?	$ \begin{array}{r} 4 \\ 3 \\ \hline 2 \\ 1 \end{array} $	21 32 5 -	19 37 3 -	15 33 1 -	1 9 12 4	20 11 4 5	76 122 25 9	33 52 11 4	3	3
6	Does the study course <i>geodesy</i> learning promote your skill to think on your speciality?	$ \begin{array}{r} 4 \\ 3 \\ 2 \\ 1 \end{array} $	43 14 1 -	32 21 5 1	25 23 1 -	- 7 8 11	26 6 5 3	126 71 20 15	54 31 9	4	4
7	Does the study course <i>geodesy</i> learning promote your understanding on creativity and innovations?		11 33 12 2	$ \begin{array}{r}10\\22\\22\\5\end{array} $	13 24 10 2	1 13 8 4	10 17 10 3	45 109 62 16	19 47 27 7	3	3
	Probability (p- value)	4	.00 20	.52 17	.00 11	1.00	.03 17	.00 65	28		
8	Does the study course <i>geodesy</i> learning promote your understanding on becoming an expert in the field of land survey?	$\frac{4}{3}$	<u>32</u> 6 -	$\frac{17}{28}$ $\frac{9}{5}$	11 24 11 3	7 11 8	17 14 6 3	$     \begin{array}{r}       105 \\       43 \\       19     \end{array}   $	28 46 18 8	3	3
9	Does the study course <i>geodesy</i> learning promote your understanding on the necessity of continuous education and necessity of extra knowledge?	$\begin{array}{r} 4\\ 3\\ 2\\ 1 \end{array}$	30 24 3 1	23 27 8 1	25 23 1 -	- 6 11 9	24 14 1 1	102 94 24 12	44 41 10 5	4	3
10	Does the course of geodesy promote the formation of understanding on the professional action impact on the environment and society?	$\begin{array}{r} 4\\ 3\\ 2\\ 1 \end{array}$	- - -	19 27 11 2	- - -	- - -	-	19 27 11 2	32 46 19 3	3	3

### St

\*4 – agree, 3 – moderately agree, 2- moderately disagree, 1 – disagree.

#### Local authorities

Total number of students

As regards local authorities, students look for information in local geodesic nets and their point coordination as well as other materials necessary before the start of completion measuring assignments or during it. A peculiarity of geodesic works is that each measuring situation has specific features. Specialists help the students to generalize and compare situations of assignments with similar real life situations.

59

49

26

58

232

40

Dialogical and exemplary principles dominate in co-operation with local authorities. As regards the exemplary principle students understand that each measuring case is particular and learn to use knowledge and skills into new cases. The students learn to co-operate with specialists with a purpose to complete the measuring assignments from dialogical aspect. Listening and argumentation skills are developed particularly (the students have to listen attentively with the purpose to understand others; find out new possibilities and alternatives in the process of assignments accomplishment; recognise their shortcomings of knowledge and skills).

## Questionnaire of students' professional competence of geodesy (Table 1)

The didactical model of geodesy studies is used at LLU completely. RTU, MAU and CULS do not use the principles of exemplary studies. They use other elements of the model. The model implementation results at LLU were approbated in the scientific conferences for land survey specialists at RTU, MAU and CULS. The students of the four universities were questioned on the development of their professional competence.

The students of LLU, RTU and MAU evaluated the effective development of their professional competence during the course of geodesy positively - respectively 87%, 88% and 80% agreed or moderately agreed. CULS students were more critical and only 44% agreed or moderately agreed.

### Examples of exemplary studies abroad nowadays

Wagenschein's ideas are supported also from Russian scientists (Васильева, 1991; Иванова, 2001), e.g. describing four main features of the principle of exemplary: thematic rather than systematic acquiring of study material considering students' interests; the usage of heuristic and problem based methods which promote the development of the students creative thinking; the study process should be creative and educational rather than focussed on getting ready and non-disputable knowledge (Васильева, 1991).

Project works in mathematics are popular in European universities and they comprise problembased studies, interdisciplinary, participant-directed studies, the principle of exemplarity, etc. (Vithal et al, 1995).

A good example was Aalborg University and Roskilde University (Denmark) outlining a valuable experience in mathematics and natural sciences teaching/learning perspectives both for teachers and students. The students themselves decided which problems they wanted to work with at Roskilde University. The projects reflected possibilities, advantages and also weak sides of the project method and the principle of exemplary. The key notions in the project works were: exemplary and interdisciplinary.

The two year introductory study programme of natural sciences at Roskilde University is an example of a project organised, participant directed, problem oriented, and interdisciplinary science study programme (Blomhøj, Kjeldsen, 2009).

### Conclusions

- The didactical model of geodesy course studies improves the quality of acquiring the course of geodesy including specific professional, varied social and cultural skills, and develops critical and analytical thinking. The principle of exemplary helps to avoid traditional thematic sequence discrepancies in laboratory works in the course of geodesy for the first year land service students at LLU. Usage of the principle of exemplary requires an extra work from a lecturer because the course has to be rearranged according to exemplars, and it means preparation for lectures and laboratory works in coherencies with the science development aspects historically, interdisciplinary, holistically and culturally.
- Exemplary studies foster students' perception of science as a cultural phenomenon and views from various angles. It helps to understand interdisciplinary of a definite theme or entire course, and to see that sciences do not function as absolutely autonomous units but they have overlapping fields.
- Exemplary studies exceed the borders of the particular study course knowledge and skills because the principles (genetic, dialogical, exemplary) promote the development of critical thinking and this attribute has an important social value. Critical thinking is one of the features of democracy and a means of multisided valuation of phenomena.

• Didactical model of geodesy studies promotes the development of LLU students' professional competence of geodesy more effectively than before its usage since the study year 2009/2010.

### References

- 1. Blomhøj M., Kjeldsen T.H. (2009). Project organised science studies at university level: exemplarity and interdisciplinary ZDM. *The International Journal on Mathematics Education*. Vol. 41, no. 1-2: pp. 183-198.
- 2. <u>Cohen L., Manion L. (1994)</u>. *Research methods in Education*. Fourth edition. NY: Routledge.
- 3. Darwin C. (1964). Recapitulation and Conclusion. In: *On the Origin of Species. A Facsimile of the First Edition*, 1859. Cambridge, Massachusetts: Harvard University Press. pp. 459-490.
- 4. Denzin N. K. (1970). *The Research Act in Sociology. A Theoretical Introduction to Sociological Methods*. Chicago: Aldine.
- Haasbroek N. D. (1968). Gemma Frisius, Tycho Brahe and Snellius, and their Triangulations Nederlandse Commissie voor Geodesie 14. Delft, [online] [12.01.2012]. Available at www.ncg.knaw.nl/Publicaties/Geodesy/pdf/36DeMunck.pdf
- 6. Hall S. G. (1904). Adolescence: Its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion, and education (Vol. I & II). New York: D. Appleton & Co.
- Petrik A. (2004). The Genetic Principle as a Link between Everyday Knowledge and Politics The-Art-of-Teaching Workshop about the Topic "Future". *Journal of Social Science Education*, No.1. [online] [28.01.2012]. Available at <u>http://www.jsse.org/2004/2004-1/futurepetrik.htm</u>
- 8. Pólya G. (1981). *Mathematical Discovery: On Understanding, Learning, and Teaching Problem* Solving. New York: Wiley.
- 9. Scott F. G. (2006). Ernst Haeckel and the Biogenetic Law. In: *Developmental Biology*. Eighth edition. [online] [31.01.2012]. Available at <u>http://8e.devbio.com/article.php?id=219</u>
- Siniscalco M. T., Auriat N. (2005). Questionnaire design. In *Quantitative research methods in educational planning. Module 8*, ed. K.N.Ross. UNESCO International Institute for Educational Planning. [online] [12.12.2011.]. Available at <a href="http://www.iiep.unesco.org/fileadmin/user\_upload/Cap\_Dev\_Training/Training\_Materials/Quality/Qu\_Mod8.pdf">http://www.iiep.unesco.org/fileadmin/user\_upload/Cap\_Dev\_Training/Training\_Materials/Quality/Qu\_Mod8.pdf</a>
- Vithal, R., Christiansen, I., Skovsmose, O. (1995). Project Work in University Mathematics Education. A Danish Experience: Aalborg University. *Educational Studies in Mathematics*. Vol. 29, No. 2, the Netherlands: Kluwer Academic Publishers, pp. 199-223.
- 12. Wagenschein M. (1999). [1968] Verstehen lehren: Genetisch. Sokratisch. Exemplarisch. (Learning Skill: Genetic. Socratic. Exemplaric.). Weinheim: Beltz.
- 13. Wagenschein M. (1968). Verstehen lehren: Genetisch. Sokratisch. Exemplarisch. (Learning Skill: Genetic. Socratic. Exemplaric.). Weinheim: Beltz.
- 14. Васильева, М. (1991). Экземплярный принцип отбора содержания обучения в педагогике ФРГ (The Principle of Exemplarity in the Choice of Teaching/Learning Content in FRG Pedagogy). *Новые исследования в педагогических науках*. по.1 (57): pp. 18-22.
- 15. Иванова, Наталья. 2001. Основные направления развития содержания общего среднего образования в Германии. (The Basic Directions of General Secondary Education Content Development in Germany). [online] [12.12.2011]. Available at <u>www.lib.volsu.ru</u> (In Russian)

# SELF-ASSESSMENT OF DOCTORAL STUDENTS' COMPETENCES FOR CREATION OF INNOVATIONS IN RESEARCH

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**Abstract.** In knowledgeable society the doctoral student's qualification is estimated by his/her abilities to create innovation in research. Creation of innovation is a process whose course and effectivity deal with certain research competences. Using the data of the pilot study done, as well as theoretical connections, there are analyzed some of doctoral students' research competence groups: sense of research (to feel), vastness of thinking (to think), research activity (to act). The study results show the weak and strong aspects of repondents' innovative potential allows us to make a prognosis of the result of doctoral students' research activity.

Keywords: doctoral student, research activity, innovation, competences, self-assessment.

#### Introduction

Innovation and competences are interrelated notions, both are to be analyzed like doctoral students' research competences: innovation as a result of research activity, while competences as the instruments for achieving this result. Research competences are in causal relationship with the research result, based on certain criteria. To find out these criteria and the appropriate competences, it is important to study the notion – *content* of innovatin..

Although the notion – *innovation* is widely used in scientific literature, it is still not so unequivocal.

But is it possible to apply it in all research fields and, whether the innovation market value is the only criterion in the long-term context? The answers most likely will not be unequivocal, since there are found both correlations and contradictions between short-term and long-term solutions. Thus, in some conditions it is suggested to divide the innovation creation process according to the aim. J.Stabulnieks, the head of Latvian Innovation Centre, is of the mind, that one should clearly divide two interrelated, though reversely directed processes – knowledge creation process (science, research) and the process of knowledge use and practical application (innovation). The aim of the first process is to create new knowledge and research both in fundamental and applied sciences, the second – to create a new offer for the market. J.Stabulnieks emphasizes that the term innovation has to be understood not like the process of acquisition of new knowledge or generation of new ideas, but the process of practical implementation of these new ideas in the sphere of industry or service sector (Stabulnieks, 2009).

In Oslo Manual (2005), on the other hand, the application of the term innovation is widened, taking into account what kind of innovation is expected: product, process, organizational or social.

The most generalized innovation definition is offered by profesor A.Kuzņecova: innovation is historically and socially developed manifestations of pre-emptive adaptations. Such a creative activity or socially significant innovation development can be considered as innovative, if it humanizes the reality (Kuzņecova, 2010).

Various definitions of the notion *-innovation* are given, as well as in the defined standards of European Qualification Framework (The European Qualifications Framework for Lifelong Learning, 2008), one can see common basic criteria of innovation – a new idea or innovation and its contribution in a certain field. These basic criteria explain the doctoral student's research aim – *innovation*, which is created by means of certain competences. Analysis and classification of competences are available using very diverse methods. F.E.Weinert (Weinert, 2001) speaks about one of the ways how to interpret competences – to use the modifications of the model "competence-result". Such an approach is turned to interrelationship of certain criteria of the aim and the necessary competences, at the same time it also allows consistently to structure all stages of innovation creation: idea, analysis, result.

Using the criteria advanced by qualification framework and innovation theories, as well as taking into account all restrictions of research (in the questionnaire there is included a limited number of competences), competences were summarized by their essence and similarity of their content into three groups:

- sense of research which is grounded in its ability intuitively to create a new idea;
- vastness of thinking which provides the assimilation of the idea perceived into the existing experience and knowledge;
- research activity implies proctical activity and attitudes in order the idea is put into life.

Competences grounded on certain criteria provide the effectivity of the result, and also allow to assess and prognose the level of competence completion (Spencer, 1993). In the classification there are not separated personality and professional dimensions. Research competences in the context of competence innovation are imultaneously an instrument, a condition, and a driving force, as well as the indicator for research quality level.

The competence groups are interrelated, similarly like separate innovation creation stages, making a continuous structure. Such a division is done for the purpose of research analysis, because in thinking and perception they take their own activity in real life, although each research competence has its own functional role.

In order to stress the dynamics of research competences and to give the information of the driving force of the competence groups, further in the text these groups will be marked by types of action: sense of research – to feel, vastness of thinking – to think, research activity – to act. These Keywords characterize the innovation creation process (Mūsu radošie resursi XXI gadsimta iespējām, 2010).

It is worth mentioning that for creation of research innovation, the appropriate competence can be analyzed in two ways: from the point of view of a scientist as an individual, and from the society's innovation culture level and from the external support. Professor M. Csikszentmihaly (Csikszentmihaly, 1996) points out that innovation and creativity develops not in people's minds but in the interaction between the people' thoughts and social culture context, therefore it is more systemic than individual phenomenon. This is the basis to analyze the influence of the external environment on the development level of doctoral students' research.

### Materials and methods

In scientific literature one can find various approaches to the classification of competences, taking into account the specific research task. Within the study mentioned, 18 competences are classified into 3 groups, modelling the doctoral students' ability to create innovation in research. The number of the chosen competences cannot be considered as the final, it can be expanded (Table 1).

Table 1

Competence group	Competence group	Competence group		
- to feel	- to think	- to act		
-ability to perceive the problem	- modelling of regularities	-ability to choose a		
-imagination	-knowledge adaptation and	corresponding tactics for action		
-vision of study process	assimilation	-effective cooperation		
-creativity	-scientific knowledge	- tolerance		
-contextual vision	-critical thinking	- stability of sction		
-link with public needs	-inductive and deductive	- mobility		
-research intuition	thinking			
	-analytical thinking			

#### Competence groups necessary for creation the research innovation

Total amount of competences included depict the structure of research innovation creation process and emphasize those competences which are especially important in each stage of this process:

• characteristics of competence group- *to feel*;

Competences included in the group characterize the first stage of research innovation creation, when it is still only in a doctoral student's mind without any certain content and form, when one has to believe in the result intuitively.

Ability to see and perceive a problem sensitively, is an essential doctoral student's competence in order the study acquires topicality and sense. Janesik V.J. defines intuition as the key competence for a scientist, who uses qualitative study methodology. We can imagine the result intuitively before we have knowledge about it (Janesik, 2001). Vision is often more important than informative knowledge, since it restricts, but imagination can cover all the possible. To perceive the problem means also to understand its topicality, public needs and to create the vision of research process. It is a creative process, where creativity is the key word for innovation (Luecke and Katz, 2003). Not in vain in the Finnish innovation strategy, adopted in 2008, it was stressed that innovation development depends on creativity stimulation (EC study about the effect of culture on creativity, 2009,152). Creativity is not only the term describing the field of art, buti n a much wider sense it means the ability to perceive, to imagine and to create something by one's own wisdom and independence.

Research intuition and creativity can be manifest only on a certain knowledge basis. To-day the quality of knowledge is more essential than its quantity, therefore the decisive fact is the skill to assimilate the known, to integrate it in various contexts. One paradox has to be taken into account that overall concentration on the knowledge of one field, can create a "tunnel vision", which, in its turn, provokes a stress between the experience and creativity (Gardner, 1993; Ericsson and Smith, 1991).

• characteristics of competence group- to think;

In the innovation creation process there interrelatedly act countervailing socially-psychological aspects: convergent and divergent thinking, adaptive and creative personality qualities, internal and external motivation. These bipolar dimensions are constantly oscillating depending on the research question: what has been created just now? (Koberg; Bagnall, 1991). Consequently, creativeness is not antithesis of scientific logic, but basic action of scientific thinking.

Knowledge assimilation process deals with critically analytical thinking. Z.Rubene (2008) defines the critical thinking as purposeful, formation of reflective judgment method in making autonomous decisions and is free of dogmatism, prejudices and stereotypes. For a doctoral student it is especially important to have scientific cognition – markedly purposeful type of cognition, intensive detection of objective new (still unknown to anybody) correlations, which need previous preparedness (Žogla, 2001). Scientific cognition makes integrative skills, which, in its turn, promotes the effect of creativity (Čehlova, 2002).

Competences of critical thinking in creation of meaningful innovation helps doctoral students analyze and modulate the problem under study, looking for non-standard solutions.

• characteristics of the competence group *-to act*.

The competences included in this group characterize the doctoral students' preconditions of research, not the instrumental activities, for instance, processing of research data. In order to pass from theoretical reflexion to practical research activity, the doctoral student has to choose a corresponding tactics of the activity. In this choice one can see a researcher's attitude to the cooperation, the ability to use mobility for research reasons, as well as the tolerance level towards the different.

In research activity the confrontation of innovative idea with different views of other scientists is inevitable. There even exists a point of view that it is not a real research innovation, if it does not cause a counter-reaction. Therefore, the competences mentioned are essential for the researcher's activity not to stop (Cropley, 2009; Luecke and Katz's, 2003).

The spectre of doctoral students' research competences characterizes the researcher's personality traits, intellect and experience, which are important to identify the study problems, to collect and analyze the information, to find alternative ideas, to evaluate (Osborn, 1953) and to create research innovation.

A researcher's individual competences develop in interaction with social and culture environment, which should be considered as an important external fact. Since 2009 Latvia has implemented a "Human resources and employment" activity with a priority in higher education and science focusing on support for doctoral studies programmes, as part of the European Social Fund framework. Its aim is

to increase, across the board, the number of specialists who have acquired the higher qualification (Dr.sc. degree) and are able to plan, create, and introduce high technology products into industry, as well as products and services with high added value, thus promoting national economy development on the basis of innovation.

At the end of 2010 a pilot study was carried out, interviewing doctoral students and candidates for a scientific degree (N=64) at Daugavpils University with an aim to investigate the doctoral students' <u>self-assessment of competence development level for creating innovation in research</u>. Doctoral students' research to a great extent is self-organized, the ability to do an adequate self-assessment is one of the essential competences, therefore the level of competence development was done by respondents themselves. For the doctoral students' self-assessment there were offered 18 competences, which in the process of processing study results were divided into 3 groups (to feel-J; to think-D, to act-R), in 5-point score (1 point-competence is not developed; 2 points- competence is developed for 25%; 3 points – competence is developed for 50%; 4 points- competence is developed for 75%; 5 points – competence is developed for 100%), including two competence development levels (A – current competence development level; B- necessary competence development level for doing innovative research activity). The obtained data were analyzed, comparing selections: doctoral student/candidate for a scientific degree; is/is not ESF special project grant holder.

The following statistical data processing methods were used: Cronbach's Alpha, Kolmogorov-Smirnov Test, Pearson Correlation, Wilcoxon Signed Ranks Test and Cluster Analysis.

#### **Results and discussion**

In order to analyze the inner coordination of self-assessment of the necessary competence groups for research innovation (J-to feel, D-to think, R-to act), there was used Cronbach's Alpha, but parametre dispersion was tested by Kolmogorov-Smirnov Test. The obtained data corresponded to the normal distribution. Using Wilcoxon Signed Ranks Test, it was analyzed whether there are statistically significant differences between the necessary and present competence development level. No statistically significant differences were found. Pearson Correlation proved a close interrelation between the competence groups J,D,R. The study data show that there exists also a close correlation between the expected (B) and the existing (A) competence level, only between the existing competence of taking action (RA) and the expected one (RB), there is observed the weakest correlation.

The close correlation of competence groups prove that doctoral students find important all research competences for the development of innovation. Both the feeling, cognitive competences and ability to act seem to be important, therefore in the study the total competence self-assessment was analyzed, as well as the relationship between competence groups and the dynamics of their self-assessment development.

Weak correlation of the competence group responsible for action between the current development level and the one necessary for research involves certain risks. Without doctoral students' inner dynamics in research, there may develop passiveness, knowledge reflexion without action, as a result, creation of the innovation process is delayed, as well as one of the innovation criteria – contribution of result. Competences included in this group characterize the doctoral students' research preconditions or attitude..Static activity makes us ask a question of a doctoral student as a researcher for changes of receptiveness in respect to oneself, his/her professional perfection either at the level of one's personality, or a researcher's potential. Creation of innovation is rarely a pronounced individual activity, more often it is based on mutual cooperation and participation; by standing apart no improvement of the competence for action can be promoted.

In the doctoral students' self-assessment of competence groups (D-to think and J-to feel) one can see that the respondents are aware that the current development level of research competences is insufficient and should be improved. This can be evaluated as a positive sign, because the processes of cognition and thinking, as well as understanding in research, are continuous.

Taking into account that Kolmogorov-Smirnov Test showed normal parameter dispersion, there was determined the mean current competence level self-assessment by groups (J,D,R) and was compared between selections: doctoral student/ a candidate for a scientific degree, is/is not ESF

special project grant holder. Between self-assessment of a doctoral student and a candidate for a scientific degree there were not found statistically significant differences, candidates for a scientific degree showed a slight tendency to evaluate higher J (-to feel) group competences. Evidently, the experience strengthens a sense of research. A sense of research is important in the whole research process, however, one has to stress its special role in the process when there is developed research strategy and vision, the link between one's research aims and public needs.

ESF special project grant golders in all three competence groups evaluate their research competence development level higher than those respondents who do not take part in the project. It can be explained by the fact, that the project conditions are mobilizing and motivating, as well as rendering wider possibilities for one's chances to improve individual research competences. Support of environment in research makes interrelationship with research competence development level.

All respondents in the study, were included into two cluster groups by three signs (J,D,R): 1 group –self-esteem above the average; 2 group- self-esteem below the average. Results are summarized in Table 2.

Table 2

Self- esteem level	Total self- esteem %	Self-esteem of doctoral students %	Self-esteem of candidate for scientific degree %	Self-esteem of project participants %	Self-esteem of respon- dents not partici- pating in the project %
Above the average	33.3%	38%	62%	76%	24%
Below the average	66.7%	55%	45%	48%	52%

### Cluster analysis of respondents' research competence self-assessment

One can find a difference between doctoral students' and candidates for a scientific degree in their competence self-assessment. Candidates for a scientific degree, being in a bigger number, have got into a higher evaluation group. However, this slight difference between doctoral students and candidates for a scientific degree in their competence evaluation level demonstrantes a slow increase of effectivity. On one hand this is the question on doctoral students' study process quality and study results, but, on the other hand, research competences analyzed in the study gives greater chanracteristics of an individual, rather than his/her researcher's identity. Candidates for a scientific degree in their research activity are in the final phase of the innovation development process, when the whole cycle has been covered from the initial idea till getting answers to the study questions. Inner logic makes us think that the perfection of research competence level should considerably increase, because competences are in causal relationship with research activity result – innovation.

More significant differences are seen between selections is/is not ESF special project grant holder, thus the external support is a very important factor in improvement of research competences, which was estimated also in the theoretical part, and yet, in order to create a purposeful innovation, without external motivation there should be also a deep internal motivation.

# Conclusions

The aim of the study was to make analysis of doctoral students' competence self-assessment for creation of innovation in research. The main conclusions of this study are as follows:

• Creation of innovation in doctoral students' research is gradual and dynamic process. The basic criteria of innovation as an aim are – idea and result – material or immaterial. The more harmoniously and purposefully is proceeding the perfection of doctoral students' competence groups (-to feel, - to think, - to act), the greater are doctoral students' possibilities to create a puposeful innovation in their research activity.

- Majority of respondents describe their research competence development level as being below the average, thus one should pay greater attention to the stimulation of respective competences corresponding to research innovation criteria during the doctoral studies.
- Doctoral students are aware of the wide spectre of necessary competences for research, still they put greater emphasis in their research on those competences which characterize thinking processes and research intuition. Competences driving research activity and their development level are evaluated as being the lowest by respondents self-assessment. The process of research innovation development is a joint process, therefore interruptions of separate cycles threaten the process in total, and its result development of national economy on the innovation basis.
- ESF financial support in the development of doctoral students' research competences plays an important role, however, in long run, one has to think about parallel support systems and formation of research innovation culture in the society.

It is impossible to create innovation in doctoral students' research activity, if researchers do not show natural research interests, in the opposite case, research result will be formal..But, is it what is expected from a researcher by the society now, when considerable financial support is allocated to doctoral students' research?







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### References

- 1. Cropley D.H. (2009). Fostering and measuring creativity and innovation: individuals, organisations and products. Proceedings for the conference "*Can creativity be measured*?", Ed. by Ernesto Villalba, Brussels.
- 2. Csikszentmihalyi M. (1996). *Creativity: Flow and the Psychology of Discovery and Invention*. Harper Collins, New York.
- 3. Čehlova Z. (2002). *Izziņas aktivitāte mācībās*. (Cognitive activity in training), Raka, Rīga. (In Latvian)
- 4. EC study about the effect of culture on creativity (2009). *The Impact of culture on creativity*, [online] [20.12.2010] Available at http://ec.europa.eu/culture/key-documents/doc/study\_impact\_cult\_creativity\_06
- Ericsson K. A. and Smith J. (1991). Toward a General Theory of Expertise: Prospects and Limits. Cambridge, Cambridge University Press, UK.
- 6. Gardner H. (1993). Creating Minds. Basic Books, New York.
- 7. Janesik V.J. (2001). Intuition and Creativity: A Pas de Deux for Qualitative Researchers, *Qualitative Inquiry*, Vol. 7, Number 5.
- 8. Koberg D. and Bagnall J. (1991). *The all new Universal Traveler: A soft-systems Guide to Creativity, Problem-Solving, and the Process of Reaching Goals.* Crisp Publications, Menlo Park, CA.
- 9. Kuznecova A. (2010). Inovācijas augstskolu didaktikā: to loma izglītības un sporta speciālistu profesionālās kompetences veidošanā un attīstībā, (Innovation in university didactics: their role in establishing and developing educators' and sport professionals' competence), The Humanities and Social Science, Vol.17, Riga Technical University. (In Latvian)
- 10. Luecke R. and Katz R. (2003). *Managing Creativity and Innovation*. Harvard Business School Press, MA, Boston.

- Mūsu radošie resursi XXI gadsimta iespējām (2010). Projekta "*Radošo industriju attīstība Latvijas-Lietuvas pierobežu reģionā*" ietvaros. (Our creative resources of the XXI century opportunities. The project "Development of creative industries of the Latvian-Lithuanian border region), [online] [12.12.2010]. Available at www.zinis.lv (In Latvian)
- 12. Osborn A. F. (1953). Applied Imagination. Scribner's, New York.
- Oslo Manual (2005). Guidelines for Collecting and Interpreting Innovation Data. [online] [07.04.2011]. Available at http://www.liaa.gov.lv/uploaded\_files/00JAUNIE00/xxxxx/Oslo%20manual%203rd%20editi on.pdf
- 14. Rubene Z. (2008). Projekts "Aktuālu, uz vajadzībām balstītu un pilnveidotu kritiskās domāšanas (KD) attīstīšanas programmu izstrādāšana un aprobēšana", (The Project "Development and approval of developmetal programm of current issues and needs-based critical thinking"), Otrais projekts no cikla "Kritiskā domāšana daudzveidības veicināšana", 2008 -2009 g. (The second project from the series "Diversity of Critical Thinking"). (In Latvian)
- 15. Spencer M.L, Spencer S.M. (1993). *Competence at Work. Models for Superior Performance*. John Wiley&Sons, Inc.
- 16. Stabulnieks J. (2009). Izglītība un inovācija. Diskusiju žurnāls Zināšanu sabiedrība un mūžizglītība, (Education and innovation. Discussion magazine Knowledge Society and Lifelong Learning), Nr 4, Banku augstskolas Biznesa un finanšu pētniecības centrs, (BA School Business and Finance Research Centre), Rīga. (In Latvian)
- 17. *The European Qualifications Framework for Lifelong Learning* (2008). [online] [23.04.2011]. Available at http://ec.europa.eu/education/pub/pdf/general/eqf/broch\_lv.pdf (In Latvian)
- 18. Žogla I. (2001). *Didaktikas teorētiskie pamati*. (Theoretical basics of didactics), Raka, Rīga. (In Latvian)
- 19. Weinert F. E. (2001). *Concept of competence: a conceptual clarification*. D. S. Rychen and L. H.

# LEARNERS' KEY COMPETENCES IN PRESCHOOL EDUCATION WHEN GETTING READY FOR THE SCHOOL

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**Abstract:** Nowadays the problem of competence formation is a topical issue in all stages of education. Therefore it requires purposeful work starting already from the preschool because it is in the preschool that the child learns to become aware of the problem, consider the advantages of one or another strategy and on its basis to choose the options of his/her actions for achieving the set aim.

This determined the purpose of the article: to work out the definition of the competence of the six years old child, to develop the competence groups and to actualize their content.

**Keywords:** competence, groups of the key competences, needs, values, motives, six years old child, the stage of personality formation.

#### Introduction

The senior stage of the development of the preschool personality is especially significant in the education system.

Today the competence approach dominates in the pedagogical practice of the world. This serves as a basis for developing and implementing the preschool curriculum, standards and the procedure of assessing the child's successes. However, the author considers that the concept 'the competence of the six years old child' is debatable:

- the competence starts at some point, so it means, that there is a pre-competence stage;
- one should be aware of what a six years old child is able to achieve in modern circumstances;
- one should know what possibilities should be offered to the six years old child in the preschool pedagogical process.

### Materials and methods

Methods of research:

- theoretical analysis;
- theoretical construction.

It is characterized by the child's psychological maturity and his orientation to getting new knowledge and skills.

The components of the child's psychological maturity are:

- child's movement activity;
- development of the cognition process (feelings, perception, memory, language, thinking, imagination);
- self-consciousness (consciousness of their identity).

At the age of six, the content of the child's movements reflects his/her abilities to perform purposeful body movements, to go at a different speed, to run fast, to hold a pencil and a pen, to draw parallels, perpendiculars, circles and spirals.

The main indices of the cognition process are:

- feelings and perception: differentiation of 7 main colors and use of them in the work, the development of the child's range of interests, perception, standards of time, working with some shapes (a triangle, a square, a rectangle and a circle);
- attention: short attention, the development of the basic attention peculiarities (volume, switching, concentration);
- memory: the volume of short visual memory, short auditory memory, the development of the process of forgetting and memorizing;
- thinking: the development of the system of notions, based on riddles, sayings and fairy-tales; the development of the main thinking operations (analysis, synthesis and generalization);

• imagination: the development of the child's abilities for analysis and synthesis using his/her imagination.

### **Results and discussion**

### Accepting the significance of the forms of the surrounding world at preschool age

Preschool education is important for the country, society, parents and the child. Children are the value of our nation. We: the parents, preschool teachers, society and our State are responsible for them – the children. The aim of our pre-school education is to create an appropriate and facilitating pedagogical situation for a child's development (social, mental, physical), to initiate his/her desire to explore the surrounding world him/herself, to acquire the experience and values created by adults, as well as to help him/her develop his/her self-conception, which is based on behavior, emotional experience, desire, interests, skills, and reflection on one's activity.

The first stage of the education system is preschool education and it is implemented from the child's birth till he/she is seven years old. Today the question about starting attending school from the age of six is especially topical and debatable. Children at this age are getting ready for the further life. Let us look into the dominants of the child's life activity (Fig. 1., 2).

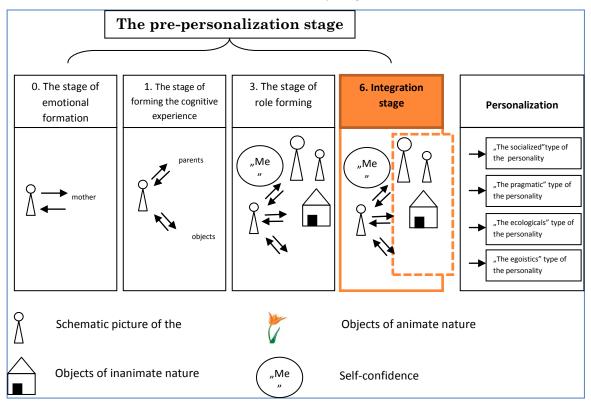


Figure 1. The process of forming the child's personality

# 0. The stage of emotional formation

The child perceives/reacts to the empathy, expresses the personal emotional attitude unawares at the conscious level in the system "mother- child".

### 1. The stage of forming the cognitive experience

The world of objects enters the content of socialization and upbringing. Its acquisition takes place in the system "the child- parents". Later it determines the content of the cognitive sphere and the child's capacity for work.

### **3.** The stage of role forming

The child starts to differentiate me and others, which results in the formation of the ME conception and attributing the significance to oneself and the diverse forms of the animate nature. This is the time of the intrapersonal formation, which later is more difficult to be subjected to changes.

#### 6. Integration stage

The result of the child's activity is the formation of a common system when the child starts to become aware of the experience of one's action and content as an entirety. The child compares the self-assessment with the assessment expressed by others and accepts/does not accept the impact of other personalities.

A PRE-SCHOOLER	A six years old child	A PUPIL
<ul> <li>Needs</li> <li>practical cognitive</li> <li>movements</li> <li>inclusion</li> <li>control</li> </ul>	The tendency towards independence and new social position (expressing purposeful activity, beginning to become aware of one's actions, understanding of the content and memorizing)	<ul> <li>Needs</li> <li>learning cognition</li> <li>control</li> <li>movements</li> <li>inclusion</li> </ul>
<ul> <li>Values</li> <li>becoming aware of oneself</li> <li>positive attitude to</li> <li>animate nature</li> <li>the world of objects</li> <li>beginning of the awareness of intellectual values, moral categories</li> </ul>	Becoming aware of one's experience in action, actualization of self-assessment (initial stage of becoming aware of one's skills, features, peculiarities)	<ul><li>Values</li><li>knowledge</li><li>assessment</li><li>self-assessment</li></ul>
<ul> <li>Motives</li> <li>concrete needs</li> <li>concrete way of implementing the needs</li> </ul>	Multiple state in the second state in the second state is a state of the second state is a state of the second state is a state of the second stat	<ul> <li>Iotives</li> <li>communication and cooperation positive environment, positive experiences, success, etc.)</li> <li>learning cognition (connection between knowledge and life, solving of problem situations, discussions, etc.)</li> </ul>

### Figure 2. The main positive innovations in the development of a six years old child

#### The essence and types of the six years old child's competences

The process of competency development is a lifelong process. The term competence has many different meanings, definitions, spellings and there are at least two competence approaches.

In studying the essence of competences and the emergence of the competence approach the author found out that:

• the 1<sup>st</sup> approach actualizes the contribution of the professional who achieves effective performance of the work. To be competent a person would need to be able to interpret the

situation in the context and to have a repertoire of possible actions to take and have trained in the possible actions in the repertoire, if this is relevant;

• the  $2^{nd}$  approach is oriented towards the result of the action. (Fig. 3.)



- the necessary knowledge, professional experience, understanding in a particular sphere, issue and the skill to apply the knowledge and experience in a concrete action. The person's (employee's) competence is assessed by the surrounding people, cooperation partners, society (Pedagoģijas terminu skaidrojošā vārdnīca, 2000).
- Mean both the efficiency, proficiency, the mental outlook, erudition or the special knowledge, and the scope of work, rights and power/ authorization in a definite sphere or jurisdiction (Tildes latviešu sinonīmu vārdnīca, 2011).

- The ability to perform actions within the some occupation according to the prescribed standard (Dubois, 2004)
- ... competences include motives, character features, self-image, knowledge and skills (Spencer, Spencer, 2008)
- McClelland used the term "competency" to substitute a narrower term "skill" and to include in it also behaviour and technical abilities. (Horton. S.. 2002)

### Figure 3. Concept of competence

Summarizing, analyzing and evaluating the studied theoretical literature on the essence of competences, their types and approaches the author developed the following definition.

The competence of a six years old child:

the expression of the totality of knowledge, skills and abilities at their initial level in the behaviour/ action, expressing responsible attitude to oneself, one's behaviour/action, other people, things and nature.

The author worked out the competence groups and actualized their content on the basis of the Regulations of the Cabinet of Ministers, the Republic of Latvia, on the State guidelines of the preschool education defining the content of the life activities of six years old children. (Fig. 4).

### 1. Cognitive Competence

Motivated acquisition of knowledge:

- listens, perceives, expresses attitude to what has been heard
- (Noteikumi par valsts pirmsskolas izglītības vadlīnijām, 2010);
- hears, pronounces correctly and differentiates sounds in words;
- understands the link between the sound and letter;
- knows the printed and written letters, writes letters, words and simple sentences;
- reads words and simple sentences according to one's abilities;
- understands what has been read, retells and expresses attitude to it;
- understands the link between the number and digit, writes digits;

- understands adding and subtraction, is able to get the result in practical situations in the range from 1 to 10;
- knows the basic elements of geometry;
- understands the logical sequence of actions and tells about it;
- describes, compares and groups objects according to different features;
- listens to music, sings, dances, plays the musical instrument and makes the rhythm;
- is motivated to further learning.

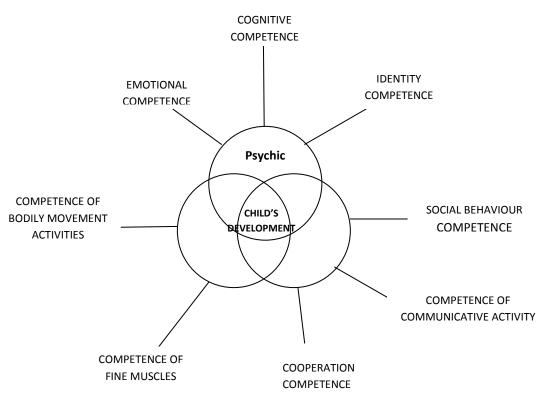


Figure 4. The groups of learner's key competences

### 2. Emotional Competence

Expressing the emotional attitude:

- fitting into different images, interprets with movements, gestures, mimics and speech, recites folk songs and poems;
- observes changes in man, nature and the events of the social life, tells about one's observations, orients oneself in the closest surroundings;
- uses creatively different materials, techniques and approaches in artistic activities and handicraft

### **3. I Identity Competence**

Assigning importance to oneself and others:

- knows and expresses emotions appropriately in the interaction with the surrounding environment;
- shows respect to people, one's own work and the work of others, has a caring attitude to the surrounding environment.

### 4. Competence of Communicative Activity

The skill to communicate and express personal attitude, position (moral):

- accepts oneself and others, sympathizes with, asks for and renders help;
- assesses one's own action and that of the others, expresses attitude to it.

### 5. Social Behavior Competence

Values, moral norms:

- gives one's name, surname, the address of the dwelling place, country in which he/she lives;
- asks for a favour, knows how to thank, asks questions and answers questions, tells about what he/she can do;
- performs simple self-service actions and observes the safety regulations;
- knows how to act in different situations when the personal safety at home, on the street, near the water is endangered;
- is responsible as regards the charged duties and personal belonging.

### 6. Cooperation Competence

The competence of action and cooperation:

- the skill to act, to cooperate;
- cooperates with peers and adults, accepts or rejects suggestions; justifies the personal opinion.

### 7. Competence of Bodily Movement Activities

Performance of basic movements and attitude to physical:

- performs the basic movements and orients oneself in space;
- keeps one's balance;
- acts within the boundaries of a definite area;
- has a positive attitude to physical activities.

### 8. Competence of Fine Muscles

Purposeful action with small objects:

- the fine muscles of hands are developed, performs purposefully actions with small objects;
- has a definite hold and uses appropriately according to the security measures the writing utensils, scissors and other tools.

#### Conclusions

Competences of a six years old child:

- develop in the preschool pedagogical process;
- result from the developmental regularities of the child and the child's possibilities;
- are implemented in the action, communication, cooperation which is the basis for acquiring the content of the competences;
- time, action, cooperation, communication should be envisaged to ensure that the child's personal achievements and attitudes were formed according to his/her knowledge, skills and consolidated in the behaviour/action experience.

#### References

- 1. Dubois D.D. (2004). *Competency-Based Human Resource Management* / Rothwell, W.J. Palo Alto, Davies Black Publishing, pp. 11-13.
- 2. Horton S. (2002). The Competency Movement. Competency Management in the Public Sector. Eds. Sylvia Horton et al. Amsterdam: IOS Press, pp. 8.
- Noteikumi par valsts pirmsskolas izglītības vadlīnijām (2010). MK noteikumi Nr.709 no 03.08.2010. (Regulations on State the Guidelines of pre-school education, Rules of Cabinet of Ministers). [online] [01.12.2011]. Available at <u>http://www.likumi.lv/doc.php?id=214604</u>
- 4. Pedagoģijas terminu skaidrojošā vārdnīca (2000). (Pedagogy terms glossary), Rīga, Zvaigzne ABC, p. 248.
- 5. Spencer L.M., Spencer S.M. (2008). *Competence at Work: Models for Superior Performance*. Wiley India Pvt. Ltd., p. 384.
- 6. Tildes latviešu sinonīmu vārdnīca. (Tilde Latvian synonym dictionary). [online] [01.12.2011]. Available at <u>http://www.letonika.lv</u>

# THE DEVELOPMENT OF THE CREATIVE POTENTIAL OF FUTURE TEACHERS THROUGH ART RESOURCES

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**Abstract:** The humanistic concept of education is at the heart of the modern teacher training. School needs an educated, independent-minded and creative teacher. The basic strategy of education today should be a subjective teacher development, the development of his professional identity and individuality. It is therefore important to identify and develop the creative potential of each student in a teachers' training institute. However, the process of identity formation of the modern teacher has so far been carried out without taking into account the psychological characteristics of individual students. Moreover, the teacher's own capabilities to know how to build pupils' creative thinking and predict the results of their achievements have not been taken into account either. The research proposes a way to tackle these problems by developing students' creativity and abilities in the field of music, literature, choreography, drawing activities. A theoretically grounded model of the developmental process of the creative potential of an emerging teacher has been devised.

**Keywords**: creative potential, art resources, the model of the developmental process of the creative potential of an emerging teacher.

#### Introduction

The present developmental stage of Latvian society is characterized by dramatic changes in socio-economic sphere and innovative processes in education which, in their turn, set out new further requirements for the professional education of prospective teachers. One of the major aspects of teacher training is the focus on the development of students' creative potential. The student as an emerging teacher must stick to the principle "from the teacher's creativity to the creativity of the learner".

Contemporary school currently requires a teacher having had an extensive humanitarian training, endowed with major capabilities to educate apart from being capable of teaching. No targets of the subject matter will prove beneficial if no educational goals are pursued. Therefore the teacher's ability to think creatively is of paramount importance and is regarded as a crucial factor in the formation of the teaching-learning process. To attain educational goals the teacher has to be a creative personality himself being well able to master the methodological basis ensuring the manifestation of the above thinking and eventually creative activity.

However, the teacher training system in an institution of higher education not always complies with the requirements imposed on pedagogical activities. Although teacher education should provide for the identification and development of the unique creative personality of the teacher trainee, it seems largely neglected in higher education. To a certain extent, it is indicative of the process of the reproduction of uniform attributes of the emerging teacher's personality. It is one of the serious shortcomings which is internally contradictory to the very concept of the approved training system. The goal of a teacher training institution is to form a creative personality of a prospective teacher, however, it is implemented within the framework of mass training. It is therefore essential that the conception of mass reproduction of prospective teachers be substituted by an individual and creative approach to teacher training. It suggests identification and formation of the creative potential of the emerging teacher, development of their professional views taking into account their psychological peculiarities. Meeting these targets will provide conditions favourable for the development of psychological readiness of prospective teachers for creative pedagogical activity.

The system of professional training of prospective primary school teachers is focused on educating of a professional mastering diverse methodologies of the subject matter and being able to apply them creatively in their pedagogical activity. Yet the topicality of modern school is the ability of a teacher to apply not only their professional skills in their entity, but also skills to use art resources of various artistic activities in their pedagogical work. It contributes both to the successful implementation of creative and pedagogical aspects of the teacher's activity directed towards the management of diverse activities of the learners themselves.

Thus, the basic strategy of modern education has to be constituted by the subjective development of a teacher, development of their professional self-awareness and individuality. It is essential that creative potential of each student be identified and developed. Therefore, under the condititions of a higher pedagogical institution the study courses like "creative self-expression in music and movement", "creative self-expression in visual arts" were introduced for the purpose of developing students' artistic and creative abilities by means of various arts. However, fairly satisfactory practical results on completion of the courses by the students necessitated provision of relevant theoretical grounding and the model of the development of the creative potential of the prospective teacher.

The issues of creativity, creative personality, creative activity have captured attention of many researchers. There is a fairly distinct notion of creativity given in scientific literature as an intellectual activity of creating something new. The necessary preconditions for the development of the creative personality of the prospective teacher are understanding the essence of pedagogical creativity, knowing regularities and ways of its implementation. Some areas of the latest pedagogical research can be outlined:

- development of a creative personality (R. Bebre, I. Jurgena, E. Černova, J. Strazdiņa, etc.);
- pedagogical aspects of creativeness (D. Liegeniece);
- development of creative abilities of pupils of senior forms ( R. Aļievs);
- issues of the creativeness of a personality and self-awareness (L. Lasmane, I. Lika);
- opportunities of mental growth of a personality in the process building awareness of emotional experience (M. Vidnere);
- development of creative thinking and imagination (L.Vigotskis, V. Hibnere);
- development of students' creativity in visual arts on the basis of integrative approach (D.Kalēja-Gasparoviča);
- development of the creative potential of a personality (M. Vāciete);
- development of creativeness in musical and pedagogical process (A. Līduma, E. Znutiņš, I. Direktorenko, Ņ. Poikāne, O.Blauzde, etc.).

Thus, the majority of research areas focus on issues relating to a creative personality, development of creativeness, its diagnosis and creative abilities. The issues of the development of the creative potential of a personality have not been sufficiently dealt with. The issue of the development of the creative potential of the personality of the prospective teacher by means of diverse arts in the study process of a higher educational institution has not been considered at all.

Having studied the above issue the following **controversies** can be defined:

- between the received knowledge of the prospective teacher trained in a higher pedagogical institution and targets of their further professional activity necessitating creative endeavour;
- between the requirements for the development of the creative personality of a teacher and lack of theoretical grounding and technology for the attainment of the above target.

#### Materials and Methods

Consequently, the **research problem** follows: what is the nature of the creative potential of a prospective teacher, what is the pedagogical technology for the development of the above potential by means of art resources and the conditions for its development, as well as, what is the pedagogical technology for the development of the creative potential of a prospective teacher.

**Aim of study** is to give theoretical grounding in pedagogical technology for the development of the creative potential of prospective teachers by means of art resources and to design a model of the process of the development of their creative potential.

**Research object** is the process of the development of the creative potential of prospective teachers under the conditions of a higher pedagogical institution.

**Research subject** is pedagogical technology for the development of the creative potential by means of art resources.

To accomplish the tasks of the study the method of theoretical analysis (analysis of scientific literature and periodicals relating to pedagogy) and observation method (observation of the learning, artistic and creative activities of the students) have been applied.

### The nature of the creative potential of the teacher and its development

Creative potential is a distinguishing feature of every personality which is not dependent upon their occupation. The present article addresses the major issues regarding the nature of the creative potential of an emerging teacher.

In scientific literature the concept "creative potential of a personality" is defined as an integral entity of innate and social attributes of a person maintaining his/her subjective need for creative self-realization and self-development (Рындак, 2006). Within the framework of the above potential creativity is acknowledged and accepted as a lifetime value and professional obligation. The basis for creative self-realization of a subject of pedagogical activity wherein creative potential manifests itself is integrity of value, cognitive and behavioural components (Мартишина, 2008).

Creative potential is neither anything a person is bestowed upon once and forever nor a genetic endowment. Its development proceeds both in school and university and it intensifies further on during the period of active pedagogical work. The efficiency of the emergence and development of the creative potential of an educator depends upon their creative activity and their involvement into sustainable pedagogical self-development.

In the present study when researching into creative potential *culturological, personality-centred and creative approaches* have been applied. The above approaches in their entity enable us to better understand the nature of the creative potential of an educator and the processes of its emergence and development.

Slastjonin V. (Сластёнин, Исаев, Шиянов, 2002) and his supporters emphasize that the historically concentrated experience which manifests itself in culture is transformed by every person and becomes endowed with *personal* meaning. The personality interprets all the wealth of culture sifting it through oneself, one's own views, ambitions, beliefs, ideals, values etc. This process contributes to the development of the creative abilities of an individual, and all the inner resources of one's "ego" find their manifestations there. The above process involves much more creativity than the mechanical since the very "culture means creativity at all times being endowed with all the characteristics of a creative act, culture is always intended for an addressee and dialogue, "acquiring" culture is a process of personal discovery, creation of the world of culture in oneself, an instance of co-experience and co-creativeness where each newly-acquired element of culture does not eradicate or deny the previous layer of culture" (Сластёнин, Исаев, Шиянов, 2002).

During the practical work it was stated that having acquired diverse pedagogical technologies both emerging and practicing teachers are considerably more vigorously engaged in an educational process, they feel unconstrained to cope with situations of facing challenges with educational targets and tend to display their professional competences more efficiently. Technological competency is related, by and large, to the power of an educator not to be dependent upon external factors, as well as the ability to increase the effectiveness of one's pedagogical activity. Mastering technologies (methodologies) does not mean cancellation of creativity, on the contrary, it enables one to combine different styles, accentuating the more successful moments of one's activity and admitting failures. It provides evidence of the emergence of the subjective development of an educator which according to the researchers (Сластёнин, Исаев, Шиянов, 2002) is related to the presence of the creative potential of a person.

The use of *creative approach* in any research into different aspects of the issue of creativity cannot be considered incidental either. An advocate of this approach underline that one of the topical issues of today is to provide conditions under which potential creativeness reaches the maximum possible for its realization. At the same time the emergence and later the development of a creative individuality occur.

## Pedagogical technology and the model of the developmental process

### of the creative potential of the prospective teacher through artistic resources

In the research into an educator's creativity R. Bebre states that self-actualization of a personality, which can be characterized as an aspiration for the development and enhancement of one's opportunities, represents a professional prerequisite for any educator (Bebre, 1997). Self-actualization of prospective teachers in the teaching-learning process presents a basis for displaying and development of their creativity.

The development of the creative potential of students in the study process occurs by means of using subjects of the course of lectures on aesthetics. This necessitates defining psychological and pedagogical preconditions.

A set of psychological and pedagogical preconditions can be defined as a quintessence of conditions providing for the achievement of the best study results. A set of the above preconditions may be endowed with their specific variance and completeness, since their impact on the learner may be different. Thus, the acquisition results of the study material may be better for one student, worse for the other, while some may reach the level of creative reflection. Favourable conditions under which students display activity may differ depending upon the student's personality.

This is testimony to the necessity to ground the organization of the study process on differentiating approach enabling one to take into account the different levels of students' preparedness and maturity in artistic and creative activity.

The set of psychological and pedagogical conditions involves a number of *subjective and objective conditions*. The conditions of the organization of the study process can be ascribed to the objective conditions favourable for the development of students' creative potential, namely:

- abiding by the unity of the targets attainable in artistic and creative, professional and pedagogical training;
- providing for the integrity of the subjects of the aesthetic course of lectures which presuppose a cumulative impact on the development of students' creative abilities through artistic resources;
- use of problem situations as a means of enhancing students' creative activity in the study process;
- creating conditions of psychological comfort favourable for students' individual creative activity in all its aspects (verbal, kinesthetic, musical, theatrical);
- establishing control and evaluation process of students' works, reflection on the results of the individual and collective effort of students' creative activity.

Success in meeting the targets of creative nature taking into consideration the above conditions presupposes the emergence of a set of pedagogical (cognitive, methodological, communicative, creative), artistic and creative (artistic, musical, kinesthetic, theatrical and creative) abilities and skills of students.

Theory and practice prove that artistic and creative abilities of a person are not genetically inherited. Genetic endowment plays a significant role in developing students' abilities, though they are subject to perfection and correction.

Observations confirm that occasionally students undervalue their abilities, particularly in musical activity. Though, according to the renowned Russian enlightener and educator Asafjev B., "there are more musically gifted people than they admit themselves" (Асафьев, 1973).

Taking into account the above factors we organized the study process based on the interrelation between the lecturer and the students (co-creativeness), where the lecturer not only imparts knowledge or trains skills, but mainly attempts to encourage the students in being active themselves. In practical work we applied a special system of creative tasks which served the above purpose and were focused on activating the students' independence and developing their artistic and creative abilities in diverse forms of activity (verbal, kinesthetic, theatrical, musical).

In the study process these forms of activity denote and are represented by all the components of the creative potential (values, cognitive and behavioural components – Mitjushina) which are integrated and interrelated. Thus, the *value component* manifests itself in the following:

- understanding and acceptance of creativity itself as a value;
- recognition of the creative nature of pedagogical activity;
- presence of creative ideals and guidelines in life and profession.

*The cognitive component* of the creative potential can be viewed as the presence of the following students' qualities:

- knowledge of the nature of a personality, its creativity and abilities;
- focusing on creativity in pedagogical activity.

*The behavioural component of doing* is related to the development of artistic and creative abilities of students.

Artistic and creative activity should contribute to the acquisition of professional and pedagogical competences of students and the emergence of their creative skills and abilities. In their turn, these abilities can develop successfully and be implemented if the formation of audio-visual perception, imagination, performing skills and emotionality is provided in the classes of the course of lectures on aesthetics. These abilities develop in their entity. Thus, audio-visual perception presents the necessary instrument of the development of imagination and fantasy (Aljievs, 1998). One should emphasize the significance of figurative thinking and imagination in visual activity (Hibnere, 1998), performing habits and emotionality in musical (Direktorenko, 2001) and theatrical activities. These abilities in their entity also presuppose improvisation and creativity both in individual and collective manifestations.

Consequently, the theoretical model of the developmental process of the creative potential of the prospective teacher through artistic resources represents the integrity of the study, developmental and self-developmental material. The content of the model involves the material constituted by the following "modules":

- *creative activity* (verbal, kinesthetic, theatrical, musical);
- creative instruction and self-instruction on playing the musical instrument, in singing, dance, artistic movement and theatrical activity;
- *improvisation*;
- *acquisition of general artistic laws through the corresponding activity*; (on the premises of understanding the rhythm of the verse, expressiveness of speech and the options of substituting speech by rhythm of music);
- acquisition of the notions of diverse kinds of arts through adequate study and creative activity and finalizing one's preferences in them.

"The modules" of study, developmental and self-developmental material are closely interrelated and include the following:

- speech (expressive and emotional reading of poems, writing poems, tales and dialogues);
- *movement* (coordination of one's movements to the rhythm and metre and in relation to other means of expressiveness in music melody, time, tone, pitch, dynamics;
- *theatre and creative play* (comprehension of the regulations of the plot, constructing a new plot, role play and creative play with a particular plot, improvisation of a performance, understanding and applying pantomime);
- *self-instruction* (mastering the techniques for playing the musical instrument, acquiring techniques in expressive singing, listening to music and its analysis, practicing dance and other musical and rhythmical movements);
- *musical improvisation* (vocal, instrumental, movement, theatrical).

The above "modules" through samples of diverse art resources reveal the synthesis of speech, movements and music, theatre and their opportunities of diverse artistic transformation. From the perception of expressiveness of speech, its intonation, accents, tempo, rhythm, on the one hand, and emotionality of plastic movements, mastering techniques in playing music and singing, on the other hand, the student advances to the awareness and invention of musical, dance /movement improvisations and theatrical compositions. It is essential that students perceive the expressiveness of diverse art resources, and be able to render their nature and mood by means of relevant devices.

Involvement of a variety of artistic resources in the study process facilitates the establishment of integrated links between the subjects of the aesthetic course of lectures and highlights general

artistic laws of different kinds of arts. The aforementioned statement bears similarity to the ideas propounded by K.Orf of the methodology "Schulverk" the underpinning principle of which is the synthesis of music, movements, speech and playing the musical instrument (Espie Estrella, 2011).

The above poses a question - what are the ways of the application of the model?

Taking into consideration the targets of training prospective teachers for pedagogical activity, three directions of the implementation of the model can be defined:

- in the teaching-learning process (during the pedagogical practice and independent pedagogical work);
- as a means of self-realization (in the study process in a higher education institution);
- in extra-curricular work with children.

The process of students' artistic creativity must be motivated, purposeful, perceived, but its result must be subject to objective analysis and adequate evaluation. In the study process the implementation of the model occurs by involving the students themselves into the creative work. Consequently, self-realization of prospective teachers in creative activity takes place, as well as conditions for the further creative activity of their pupils are provided. This is shown in Table 1.

Table 1

# Ways of implementation of the model of the development of the creative potential of the prospective teacher

of the creative potential of the prospective teacher				
Ways of the	Methods and forms of the development of the creative model of prospective			
application of	teachers			
the model				
In the study	Acquisition of artistic regularities of different arts, gaining knowledge of the nature			
process	of creativity, creative abilities, creative nature of pedagogical activity; defining and			
	building awareness of one's creative ideals and guidelines in life and profession.			
As a means of	Analysis of pedagogical, psychological and methodological literature on creativity;			
self-	achieving individual creative targets for visual arts, music and movements;			
instruction	acquisition of skills at playing the musical instrument; producing compositions by			
	using various artistic resources and their presentation within the framework of the			
	activity "Radoša diena" ("Creative Day"); solving problem situations, reflection on			
	the results of individual and collective creative activity of students.			
Working with	Organization of creative activity of pupils in subject and integrated classes during			
pupils	the pedagogical practice (organization of competitions, quizzes, didactic games,			
	accomplishing creative tasks, constructing crosswords, tables); producing particular			
	aesthetic situations (attending theatres, concerts and lectures on music, exhibitions,			
	museums, discussing pictures); writing reviews, analysis of the pieces of music			
	heard; organization of out-of-class activities (writing plots, producing musical and			
	literary compositions, organization of playing activities for children ).			

### **Results and discussion**

- The nature of the creative potential of the teacher has been defined.
- The model of the creative developmental process of the potential of an educator through artistic resources devised on the basis of culturological, personality-centred and creative approaches implies the structure of the creative potential of an educator and has been drawn up pursuant to the logic of the pedagogical process. Its implementation within the framework of the students' artistically creative activity ensures the development of their interests, inclinations and creative abilities. The model is characterized by the integrity of its components (value, cognitive, behavioural).
- The content of the model has been elaborated and ways of its application have been designated for various spheres of the students' activity in the study process.
- Methods and forms of the development of students' creative potential have been defined.
- Opportunities for the development and manifestation of an individual creative potential of an emerging teacher through artistic resources and abilities to work in a team have been finalized.

### Conclusions

- Creative potential represents an integral personality formation presupposing the subjective need for creative self-realization. Creative potential is characterized by the integration of value, cognitive and behavioural components.
- Development of creative potential is a complex multiform process which necessitates the design of such a model of the developmental process of prospective teachers' creative potential through artistic resources that would disclose its structure and is drawn up in conformity with the logic of the study process.
- The model of the developmental process of the creative potential of prospective teachers through artistic resources has to be guided by culturological, personality-centred, creative and differentiating approaches to the research into creative potential.
- Pedagogical technology of the development of the creative potential is based on a set of psychological and pedagogical conditions (objective and subjective) which are taken into consideration when running the teaching-learning process.
- Methods and forms of the development of the creative potential through artistic resources are determined by the ways of the application of the model (in teaching-learning activities, as a means of self-realization, working with pupils).
- Research results can be for use in educating trainee teachers in an institution of higher education as well as in the system of teacher development.

### **References:**

- 1. Aļijevs R. (1998). Skola radošo spēju veicināšanai. (School for promoting creativity). R., RaKa. (In Latvian)
- 2. Bebre R. (1997). Kreativitāte un skolotāja personība. (Creativity and the teacher's personality), Skolotājs Nr. 1., Rīga. (In Latvian)
- Direktorenko I. (2001). Studentu klavierspēles iemaņu veidošanas pedagoģiskie priekšnosacījumi. (Pedagogical preconditions of development of students' piano skills). Promocijas darbs (Doctoral Thesis), LU, R. (In Latvian)
- 4. Espie Estrella *The Orff Approach*. About.com. Music Education [online] [20.11.2011]. Available at <u>http://musiced.about.com/od/lessonplans/tp/orffmethod.htm</u>
- 5. Hibnere V.(1998). *Bērnu vizuālā darbība* (Children's visual activity), I daļa. R, RaKa. (In Latvian)
- 6. Асафьев Б. В. (1973). О музыкально-творческих навыках у детей (About children's musical and creative skills). Избранные статьи о музыкальном просвещении и образовании (Selected articles on music education). Изд. 2., Л., 1973. (In Russian).
- 7. Мартишина Н.В. (2008). Творческий потенциал педагога, его становление и развитие: методологические подходы к исследованию (The development and creative potential of the teacher: methodological approach to the research). *Российский научный журнал, Nr.* 3, pp.133-138. (In Russian).
- 8. Рындак В.Г. (2006). Педагогическое зло: истоки, последствия, предупреждение (Teaching evil: origin, consequences and prevention). Преподаватель XXI век: Общерос. науч.-практ. журнал "О мире образования" № 1.рр. 61-64. (In Russian).
- Сластёнин В.А., Исаев И., Шиянов Е. (2002). Педагогика. Учеб. пособие для студ. высш. пед. учеб. заведений (Pedagogy. Learning tool for teaching higher education students). М., Издательский центр "Академия", 576 с. (In Russian).

# **PROMOTING STUDENTS' PARTICIPATION IN THE MULTINATIONAL ENVIRONMENT OF LATVIAN INSTITUTIONS OF HIGHER EDUCATION**

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Abstract: At the beginning of the 21<sup>st</sup> century, there has developed a new situation in Latvia as a result of political, economic, and social transformations. Along with the consolidation of basic human rights, the declaration of civic society, equal rights for all individuals, and respect for different values, the factor of participation is also brought to the foreground as a precondition for successful process of integration. The purpose of the article is to summarise and analyse the results of various studies concerning the content of students' participation and the forms of its implementation. Materials and methods. The theoretical approach – the analysis of literature and documents. The empirical approach - surveys. There have been carried out both qualitative and quantitative analyses of the data. Results. The studies concerning students' civic participation in Latvia reveal several factors promoting the enrichment of students' participation in various social integration processes. It is concluded in the article that in order to promote students' civic participation it is necessary to pay attention not only to macro-level participation, i.e. participation in political and social activities, the involvement of young people in political decision-making at the national and municipal level, but also to develop institutions of higher education as models for the society, thus promoting the development of the experience of participation both among students and the academic staff in the actual integration process in the multinational academic environment.

Keywords: higher education, citizenship education, student's participation, civic competencies.

#### Introduction

At the beginning of the 21<sup>st</sup> century, there has developed a new situation in Latvia as a result of political, economic, and social transformations. Along with the consolidation of basic human rights, the declaration of civil society, equal rights for all individuals, and respect for different values, the factor of participation is also brought to the foreground as a precondition for successful process of integration. Nowadays, the essence of civic participation is focused on reducing the proportion of government hierarchy and power relationships.

Nowadays, the higher educational establishments are regarded as the institutions facilitating the development of social consciousness and as the environment for citizenship education. They function as the carriers of changes – as a model of modern, multinational civil society supported by local culture promoting the development of the experience of participation both among students and the academic staff. Latvian institutions of higher education have always been heterogeneous as far as their ethnic and linguistic compositions are concerned. This gives students an opportunity to exercise participation in various integration processes in the academic environment.

As a result, higher education has to tackle specific objectives – to create preconditions for the development of active and enterprising citizens who are open to changes, do not shy away from problems and are ready to resolve them in a creative and competent way based on the knowledge and skills acquired through life-long-learning.

The article is devoted to students' civic participation as an important priority in developing the youth policy in Latvia. Issues concerning participation are dealt with both in Latvian and the EU policy documents, their aims, objectives, and principles. Generally, the aims of the youth policy are focused on the implementation of the idea of civic participation and democratic values in real life. Its diverse objectives provide for more active youth engagement in various activities within the institutions of higher education and in national-level social and democratic processes, as well as more support for various forms of students' civic participation.

The purpose of the article is to summarise and analyse the results of various studies concerning the essence and the content of students' participation and the forms of its implementation in various civic activities.

### Materials and Methods.

The theoretical approach – the analysis of academic literature, normative documents and studies. The empirical approach – a students' survey. There are both theoretical and practical aspects to this task.

Participation in voluntary activity matters for three broad categories of reasons:

- the development of the capacities of the individual;
- the creation of community and the cultivation of democratic virtues;
- the equal protection of interests in public life.

These three propositions suggest that incorporating expressive benefits of participation in a rational-choice framework does not result in tautology or even ad hocery.

In Latvia, the key policy documents regulating the issue of participation are 'Youth Law' (2008) and 'The Guidelines of Youth Policy for 2009–2018' (2009).

Based on the principles identified in 'The Guidelines of Youth Policy for 2009 - 2018' there has been developed a special 'Youth Policy State Programme for 2009 - 2013'.

In this document, there have been defined specific measures how to achieve the goals of the youth policy:

- youth participation and useful utilisation of leisure time;
- promoting socially-economic growth of young people, competitiveness, and social inclusion;
- improving the quality of life of young people;
- promoting youth initiative and participation in decision-making (The Youth Policy State Programme for 2009 2013, 2009).

Several core principles permeate through the above mentioned youth policy document:

- The principle of participation grants young people the opportunity to participate in the debates concerning the decisions affecting youth policy before the decisions are taken;
- The principle of equal opportunities grants young people the right to participate actively and without any discrimination in various social, political, cultural, and economic activities;
- The principle of information accessibility requires providing young people with information corresponding to their development needs;
- The principle of considering the interests of young people provides that the interests, rights, needs, and possibilities of young people have to be considered tackling any youth-related issues;
- The principle of youth integration promotes intercultural dialogue in all stages concerning the development and the implementation of the youth policy.

In these policy documents, participation is more focused on political and social activities, on involving young people in making decisions which affect the youth policy at the national and the municipal level.

In the recent years, there have also been carried out several studies in Latvia concerning the aspects of social integration where the issues concerning civic participation and identity have been considered as well. However, compared to other states, there have been very few studies devoted to the manifestations of the civic engagement of young people, students in particular. For this reason, this can be considered as a topical issue in Latvia at present.

According to the results of 'The Study of the Social and Political Activity of Latvian Youth' carried out in 2008, young people mainly get information from their friends (72%); quite often they use the internet (28%); more seldom - billboards (19%) and mass media (18%), while only 20% of the respondents get information from school. In the study, both young people and experts mention lack of

information as one factor hindering participation along with such factors as lack of interest and time (The Study of the Social and Political Activity of Latvian Youth, 2008).

In the study 'The Development of Youth Identity and Participation' (2005) the authors have emphasized the need for participation skills and have modelled 4 possible scenarios for the development of youth engagement in the next 10 years:

- 1. The opportunities increase, but the skills remain at the present level. The Youth Law is adopted; the responsibility of various ministries concerning the issues of youth engagement is streamlined; interest in youth activities is increasing as a result, there are more favourable preconditions for faster increase in youth participation.
- 2. The opportunities do not change, but the skills stay at the same level. The Youth Law is not adopted; in some municipalities support for the youth is considered as a priority, which leads to regional inequality with regard to youth participation all in all, the issue concerning youth participation is dealt with in an unorganized manner.
- The opportunities do not change, but the skills are developed. There are no significant
  institutional changes at the national level as far as support for the youth activities is concerned
   as a result, young people acquire the skills promoting participation in a non-formal way,
  mainly through participation in non-governmental organizations.
- 4. The opportunities expand, and the skills are developed. This is the most optimistic scenario, which provides for both the streamlining of the institutional environment and the consolidation of the youth participation skills and knowledge. Unfortunately, the probability of this scenario is low. (Koroleva, Snikere, Trapenciere, Trapencieris, 2005, p 29).

It has to be noted that the latest studies pay particular attention to considering the processes of youth civic engagement and integration within the context of the increasing migration and globalization processes as well as accession to the multicultural European Union (Pigozne, 2010).

Since low and ineffective civic participation of young people has been pointed out as one of the most topical issues both in the normative documents and the studies mentioned above, it is important to develop proposals for its promoting in the Latvian institutions of higher education.

### **Results and discussion**

According to the purpose of the present study, there was carried out a students' survey in two Latvian institutions of higher education (Riga Teacher Training and Educational Management Academy and the University of Rezekne) in order to find out how students understand the notions "participation" and "civic participation", and how they interpret the implementation of civic participation in civic activities. The sample included 136 students, with 97 1st year students of Riga Teacher Training and Educational Management Academy and 39 1st year students of the University of Rezekne among them.

According to the academic literature, participation refers to a combination of three core abilities - self-determination, co-determination, and solidarity - which has been independently developed and is subject to each individual's personal responsibility (Klafki, 1991, 95).

In response to the survey question concerning the content of the notion "participation", most of the students (84%) in all the groups agreed that the content of the notion "participation" was very broad. Actually, participation can manifest itself in all spheres of human life, at various levels and in various forms. Participation is a means, an end, and a process rather than separate events. According to the respondents (52%), there can be singled out both direct and indirect forms of participation. Direct participation appears at different degrees of activity – starting from attending different events and finishing with organizing events, development and implementation of projects, development of skills and bringing out self-initiative. Direct participation was characterised more precisely as manifestations of activity in various social-demographic groups and even according to various social-demographic characteristics: sex, age, social-economic status, place of residence.

Indirect participation was generally characterised as the participation that an individual can realize "without doing anything" or without "intending", "noticing" it, "unwittingly", i.e. just by his or her presence or existence.

Here are some of the key ideas of the 1<sup>st</sup> year students concerning the core content of the notion 'participation':

'Participation means being frank, open, and friendly – collaborating. It is a moment when people help each other. Our life would be much brighter if there were more people who would be ready to sacrifice their time, in order to work for the sake of other people, for the future. Participation is a value that has to be appreciated and respected, since an individual who helps us has been open, kind and willing to do good for us.'

'Participation is collaboration in a certain activity or process. A person might not even realize that he or she is involved in some process. For instance, each individual is indirectly involved in shaping the life of the state.'

'Nowadays participation has the same meaning as joining in. Participation is a voluntary activity to a certain extent. There can be imposed participation in some exceptional cases where we do not actually want to participate. Participation can also be understood as being engaged in various activities and events.'

'Participation is a process where an individual can work together with other people, can help someone in a certain activity at school, at work or at home. Throughout all our life, we take part in resolving other people's problems and difficulties. Our life is participation. It is a process that refers to human interaction.'

'In my opinion, participation implies self-demonstration. It also involves individual's right to obtain all kinds of information; for instance, concerning political issues, topical social issues, etc. By means of participation an individual gains new experience and enriches information, which is very important when acquiring a new profession as well.'

In response to the question concerning the core content of the notion 'civic participation', most of the students pointed out that civic participation was closely connected with the development of civil society (11%), strengthening of patriotism (26%), environmental protection (37%), and being loyal to one's state (26%).

The responses of the  $1^{st}$  year students clearly show the diversity of the content of the notion:

'Civic participation refers to individual's engagement in the matters of the society and the state. Without the interest of the population in the state matters there can appear a gap between authority and society. Active civic participation leads to the situation that the interests of the majority are represented. Civic participation also strengthens the political integration of the population. Civic participation means taking part in the elections, in the dwellers' meetings at the blocks of flats.'

'Civic participation is an integral part and a characteristic of a democratic society. Civic participation refers to the active engagement of the population in the political and economic processes of the state. The most typical example of civic participation is taking part in the elections. The more actively society expresses its opinion concerning various state issues, the better the work of state administration and politicians should be. Civic participation also implies involvement in non-governmental organizations, which makes it possible to better protect the interests of a certain social group and to lobby them. Civic participation also refers to the analysis of the normative acts of the state and expressing ones' opinion in order to improve and amend them. Civic participation excludes indifference to the processes taking place in the state; it is not "sitting in a cave" and grumbling that "everything is bad, and nothing is happening." Another typical example of civic participation is a referendum – it is an opportunity for people to initiate amendments in the normative acts and to make the parliament amend or rescind a law by the opinion expressed by the majority of voters. In this way, people can control the work of their deputies.'

'To me, civic participation is associated with civic consciousness, with citizens' duty to their state, country and fellow-citizens. Civic participation manifests itself in elections, protests, expressing proposals, writing letters, taking part in events. Besides, civic participation also involves maintaining one's land in good order, improving and protecting it. It also implies supporting one's fellow-citizens,

not being indifferent to what is going on around you, not passing by, but joining in because it also affects you and your country.'

'To me, the notion "civic participation" refers to responsibility first of all - responsibility to oneself, one's closest people, and the state. Civic participation concerns each individual; it's just that nowadays some people have forgotten their responsibility or pretend not to notice it.'

'In my opinion, civic participation means the engagement of each individual in the social, political and public matters in their state. Civic participation refers to people's interests, representation of common interests and bringing them forward; it implies making decisions affecting the state processes and events (e.g. elections); it means coming up with new ideas and putting new discoveries in social practice.'

'Without people's interest in the state matters, there can appear a gap between the state and the society, various social groups and individuals. Active civic participation means that the interests of the majority are represented, people are united. Civil society is a society where individuals cooperate with each another and with the public authority resolving the issues of social importance. Civil society also ensures the protection of the interests of those groups that can not protect themselves using economic and political measures.

'Civic participation, in my view, refers to citizens' involvement in improving their state and resolving political issues. It is important to me as a citizen of this country what happens in my homeland, to join in and not to stand apart. I take part in the parliamentary elections; I love my homeland, and it is important to me that things are put in order. I take part in the spring cleaning activities. The environment is important to me and so is the micro-environment – my family; protecting them is the duty of each citizen.'

On the other hand, responses to the question concerning their own 'personal civic participation' confirmed the well-known fact that among students, like among the youth in general, there are more active and more passive individuals, and the same level of activity can not be required or expected from everybody.

Engagement in various civic activities is the voluntary choice of each student. It was emphasized by 79 % of the respondents. A lot of them (65%) pointed out that they were too busy with other things (studies, business, work, family), so they could not be actively involved in various activities related to civic participation.

The main emphasis was put on engagement in the traditional mechanisms of representative democracy – parliamentary and municipal elections and referendums.

A considerable number of the respondents pointed out their active involvement in environmental protection, students' self-government and corporations.

According to the results of the survey, about 20% of the students are unwilling to take part in various civic activities and can be considered as very passive. On the other hand, 65% of the students willingly take part in various social activities, while 15% of the students demonstrate high level of civic activity and are actively engaged in tackling various political issues (take part in students' self-government, competitions, develop projects, participate in conferences, charity activities, strikes, pickets, boycotts, marches, etc.).

The responses of the 1<sup>st</sup> year students show the diversity of the content of the notion:

'My civic participation is my active engagement in the social and educational life of my district (I participate in various projects and events, charity activities that improve both my own life and that of other people – my friends, colleagues, neighbours, and my students – as well as bring joy and are morally and aesthetically rewarding). Political and economic processes in this country are important to me. Therefore, as the citizen of Latvia, I actively participate in various electoral processes.'

'My civic participation manifests itself in helping my town, in making it clean and tidy, first of all.'

'My civic participation mainly manifests itself as involvement in various state events and processes – elections, protests, developing proposals for various regulatory documents which can affect the life of my state, its image and essence. I realize my civic participation lending a hand in

tidying my town and keeping my own little plot of land in order as well as raising my children as good citizens and not being indifferent to the problems of my fellow-citizens, as far as it is possible.'

'I worry about my state and want to change something in myself and others so that we could live better, without thinking whether we would have a future. We have to be united and focused on one common goal – to make our state such that our children would not be ashamed of it.

'I try to publish articles in all the local periodicals, and by means of these publications I want to show how many smart, hard-working and good people we have among us. And all together we are developing this country as well as we can, with our individual work, conscientious work for the sake of all of us.'

'I take part in the elections and trade union meetings; I also attended the forum in order to express my opinion. I participate in protest campaigns and strikes. My civic duty is to take part in various debates concerning issues which are topical to me and where I have something to contribute.'

All in all, the students' responses demonstrate that the experience of civic participation enables them to see new opportunities both for themselves and for the state and society in general.

A significant number of the respondents emphasized their active engagement in environmental protection and students' self-government.

It is very important for the students to be aware of the need to look for the opportunities of selfactualization by developing their ability of selectivity, which is connected with responsibility, decision-making, and determination of ones' life values.

Participation is an integral part of the process of higher education; it is a means, an end, and a continuous process rather than a separate event. Having been involved in education, people can not remain passive; on the contrary, they strive for active participation in social activities. Moreover, both the academic staff and the students are engaged not only in studies and research, but they can also take part in the university administration and affect the decision-making processes at the university. Accepting the challenge of life-long learning is an opportunity to learn a lot apart from the classroom activities and to gain the practical experience of civic participation.

In order to promote students' civic participation, it is important to pay attention to this issue not only in the macro-context, i.e. participation in political and social activities, engagement in the decision-making processes affecting the youth policy at the national, regional and the municipal level, but also to participation at the mezzo- and micro-level context, using institutions of higher education as the integration models of the civil society. It would ensure a more stable evaluation of the participation experience both of the academic staff and the students in the actual integration process in the multinational environment of the institution of higher education.

#### Conclusions

- Nowadays, the institutions of higher education are regarded as the places facilitating the development of social consciousness and as the environment for citizenship education. They function as the carriers of changes as a model of modern, multinational civil society supported by local culture promoting the development of the experience of participation both among students and the academic staff. Latvian institutions of higher education have always been heterogeneous as far as their ethnic and linguistic compositions are concerned. This gives students an opportunity to exercise participation in various integration processes in the academic environment.
- Participation is an integral part of the process of higher education. It is a means, an end, and a continuous process rather than a separate event. Participation emphasizes individuals' self-determination, self responsibility and self-activity; it characterises the way of individuals' advancement throughout his or her life. Participation is closely linked with individuals' value orientations.
- The civic participation greatly influences the development of student's civic competences as the whole of values, skills, knowledge and understanding for the benefit of both the individual and society.

• When encountering difficulties, young people do not perceive them as problems but as new opportunities and challenges since civic participation provides opportunities not only for collaboration, but also for joint decision-making and co-determination.

#### References

- Klafki W. (1991). Neue Studien zur Bildungstheorie und Didaktik: Zeitgenmässe Allgemeinbildung und kritisch - konstruktive Didaktik (New studies on educational theory and didactics: General knowledge and critical - constructive didactics). Weinheim. Basel.
- Koroleva I., Snikere S., Trapenciere I., Trapencieris M. (2005). *The Development of Youth Identity and Participation*. Riga, UL Institute of Philosophy and Sociology, [online] [01.03.2011.]. Available at www.izm.gov.lv/upload\_file/jaunatne/petijumi/LSIF\_jauniesu\_lidzdaliba\_smal.pdf
- Pigozne T. (2010). The Youth Participation in the Process of Integration in the Multicultural Environment, [online] [25.04.2011.]. Available at https://luis.lanet.lv/pls/pub/luj.fprnt?l=1&fn=F6231 46486/Tamara% 20Pigozne% 202010.pdf
- 4. The Guidelines of Youth Policy for 2009 2018 (2009), [online] [01.03.2011]. Available at www.bm.gov.lv/lat/normativie\_akti/politikas\_dokumenti/ ?doc=11642
- 5. The Study of the Social and Political Activity of Latvian Youth (2008), [online] [01.03.2011]. Available at www.jaunatneslietas.lv/upload/dokumentipetijums.doc
- 6. The Youth Policy State Programme for 2005 2009 (2005), [online] [01.03.2011]. Available at www.izm.gov.lv/BGLM\_260405\_Jaunat\_polit\_valsts\_pr\_2005-2009.doc
- 7. The Youth Policy State Programme for 2009 (2009), [online] [01.03.2011]. Available at www.bm.gov.lv/lat/valsts\_programmas/projekti/?doc=11175
- 8. The Youth Policy State Programme for 2009 2013 (2009), [online] [01.03.2010.]. Available at <a href="https://www.likumi.lv/doc.php?id=196801">www.likumi.lv/doc.php?id=196801</a>
- 9. Youth Law (2008), [online] [12.03.2010]. Available at http://www.likumi.lv/ doc.php?id=175920

#### PROMOTING STUDENTS LITERARY INTERESTS AS MEANS OF DEVELOPING STUDENTS' READING COMPETENCE

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**Abstract:** The article presents the results obtained from the study of learners' literary interests and the principles of developing the textbooks and teaching/learning materials for Grade 9. Literary interests are defined as a specific attitude to fiction, and it is one of the kinds of mental interests closely connected with the personality's thinking, imagination, memory. The study pays special attention to identifying the learners' attitude towards literary works and folklore materials included in the teaching/learning aids. In order to promote reading competence one of the prerequisites is finding out he learners' literary interests and their purposeful advancement by choosing content of learning in accordance with the requirements of the teaching standard. Work with literary texts affords an opportunity for the learners not only to get acquainted with the universal human values but also to improve their knowledge and skills necessary for their successful life.

Keywords: reading competence, literary interests, motivation, reading promotion.

#### Introduction

The results of the investigation of the international student assessment programme of the learners' reading competence in 2009 (OECD PISA 2009) show that "more than half of the learners in Latvia read less than half an hour a day or they do not read at all (30%). The average success of these learners is considerably lower than that of the learners who spend at least an hour on reading for joy." (Geske, Grīnfelds.., 2010). This fact as such should cause alarm in the society of Latvia because it is the reading competence that ensures the possibility for man to become a full-fledged participant in the education, work and all the other life processes.

The term "competence" is understood as the acquired knowledge, professional experience, comprehension of a certain sphere or issue, and skills of applying one's knowledge and experience in a particular activity. A person's (employee's) competence is evaluated by the surrounding people, collaboration partners, society. (Belickis, Blūma..., 2000). Reading competence means comprehension, usage and evaluation of written texts, in order to achieve one's aims to perfect one's knowledge and potentiality and to participate in social life. (Geske, Grīnfelds..., 2010). Reading competence does not mean only one's ability to perceive the superficial gist of the text but also to comprehend the author's communicative purpose and the evaluation of his skill to achieve his aim, as well as to express one's point of view, which is based on sound arguments as concerning the text. The development of reading competence should be paid especially great attention to because the skill to comprehend texts of different kinds (among them works of art, tables, charts) to find essential information in them when answering one or another question, to evaluate the different aspects of various texts, which serve as part of the basis for the adolescents' further education and life in society. (Geske, Grīnfelds..., 2007)

The main way of improving one's reading competence is regular reading of manifold texts. Several investigations in the world (Linnakylä, Malin.., 2004; Geske, Grīnfelds.., 2010) have proved that one of the causes of poor reading is the fact the learner does not get engaged in reading. The risk still grows if the texts chosen for reading are homogeneous.

The main role for involving the learner in reading is played by motivation -a set of motives which stimulate and substantiate the learners' activities, actions, behaviour, attitudes, needs, interests, a. o. (Belickis, Blūma., 2000). Reading motivation promotes the desirable activity - reading. An

important role for the promotion of reading motivation is played by the provision of the reading material, which corresponds to the learners' age group, is topical and varied. Investigations show that readers who face difficulties in reading show remarkable cognitive abilities, perseverance and work if the text agrees with their abilities and private interest. And vice versa - a gifted learner can show poor cognitive abilities and low motivation when working with a text which is too complicated and personally indifferent. (Ivey, 1999).

The authors of the article lay stress on the opinion of the particular role of fiction in the development of manifold reading experience, which is determined by the richness of the genre, the themed and the style of fiction.

One of the preconditions for the development of the learners' reading competence is the comprehension of the learners' literary interests and their targeted guidance by making reading popular.

Literary interests are defined as a specific attitude towards fiction and they are a kind of intellectual interests, which are closely connected with the individual's thinking, imagination, memory. (Gudakovska, 1997). The readers' interests depend on many factors including: the child's age, the environment in which the child grows up, education in the family, the child's sex, reading competence, the level of the development of technologies, the current events in society, advertisement, fashion, etc.

The learners' interest in and attitude to reading are characterized and their reading competence is also influenced by the time the reader spends on reading for joy.

#### Materials and Methods

Unfortunately, in Latvia there has not been made any serious investigation of adolescents' literary interests during the last decade. The reading promotion programme "The children's jury" (since 2011 "The children's and the adolescents' jury") give an insight in the tendencies of the adolescents' choice of books, although it comprises only a small part of the learners of this age.

The following methods were used when studying the learners' literary interests:

- 1. analysis of theoretical literature,
- 2. summary and analysis of the results of the reading promotion program "The Children's Jury",
- 3. an interview with casually chosen learners of Grades 8 and 9 (92 learners) of 4 Riga schools.

#### **Results and discussion**

The authors of the article have analysed literary interests of the learners of Grades 8-9, the results of which are seen in the evaluation of books included in the collection during the period of five years (2006-2010). As the collection includes translated and original literary works of different kinds the evaluation of the readers shows well the adolescents' most beloved genres and themes of fiction.

The 15 books occupying the 1st, the 2nd and the 3rd places can be divided into two groups – 1) fantasy and science fiction genre works and 2) stories and novels depicting real life. However, both the groups are represented equally - 7 books in each group. There remains only one work outside the groups – the literary fairy- tale "The white world" by Māra Cielēna (Table 1).

The equal number of the choice of fantasy and science fiction novels and those depicting real life leads one to the conclusion that the literary interests of the senior adolescents are consistently connected with the two genres mentioned before. It is apparent that the youth in Latvia read enthusiastically books written by popular fantasy and science fiction writers, such as Suzanne Collins, Mary Hoffman, Silvana de Mari, Jonathan Stroud, Michael Scott and others. It is supposed that the first book written by Latvian writer Laura Dreiže "The Dragon's Song" has become attractive to the reader because of it belonging to the fantasy genre. Fantasy and imagination are not literature to be simply perceived because of its characteristic intricate structure of space and time, a wide and multiform range of the depicted characters, a dynamic and forked plot and a wide volume.

Table 1

programme "The Children's Jury" (Years 2006 - 2010)							
Year, place	Fantasy and science fiction	Novels and stories depicting real life	Literary fairy- tale				
Year 2006		Jacqueline Wilson "Lola Rose"					
1 <sup>st</sup> place		1					
2 <sup>nd</sup> place	Mary Hoffman "Stravaganza. City of Masks"						
3 <sup>rd</sup> place			Māra Cielēna "The White World"				
Year 2007		Aidi Vallik "What to do, Ann?"					
1 <sup>st</sup> place		(946 voices)					
2 <sup>nd</sup> place	Silvana de Mari "The Last Elf" (433 voices)						
3 <sup>rd</sup> place	Jonathan Stroud "The Amulet of Samarkand" (377 voices)						
Year <b>2008</b> 1 <sup>st</sup> place		Māris Rungulis "Raspberries" (1278 voices)					
2 <sup>nd</sup> place		Kristīne Ulberga-Rubīne "I Don't Read Books" (920 voices)					
3 <sup>rd</sup> place		Kira Poutanen "The Beautiful Sea" (438 voices)					
Year <b>2009</b> 1 <sup>st</sup> place		Anna Skaidrīte Gailīte "Patricia's Diary" (502 voices)					
2 <sup>nd</sup> place		Anna Gavalda "35 kilograms of Hope" (368 voices)					
3 <sup>rd</sup> place	Michael Scott "The Alchemist" (298 voices)						
Year <b>2010</b> 1 <sup>st</sup> place	Suzanne Collins "The Hunger Games" (815 voices)						
2 <sup>nd</sup> place	Laura Dreiže "The Dragon's Song" (209 voices)						
3 <sup>rd</sup> place	Maggie Stiefvater "Lament: the Fairy Queen's Deception" (144 voices)						

Books coming in the first three places in the reading promotion programme "The Children's Jury" (Years 2006 - 2010)

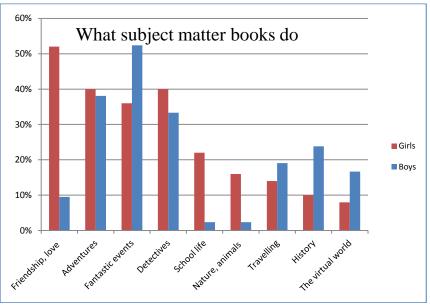
That is why interest in this genre promotes the development of reading competence. The results of the children's jury reveal that this kind of literature is read enthusiastically by both girls and boys. For example, the boys who have voted for "The Hunger games" by Suzanne Collins stress that they are captivated by adventures in extreme situations, struggles, by an unexpected turn of the plot. The girls write in a more expanded way, paying more attention to the depiction of feelings: "The book contains both adventures and love - everything that a good book needs." (Elīna, Grade 9), "It is a captivating book full of adventures" (Ilze, Grade 9), "It is an emotional and painfully real book" (Elīna, Grade 9), "The writer describes devoted friendship and love. It was the most fascinated thing in the book" (Agita, Grade 9), "The book is very interesting; you cannot put it aside before you read it to the end" (Dinija, Grade 9).

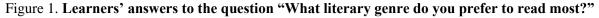
For several years running preference has been given to stories and novels about real life –written by both popular foreign writers Jacqueline, Wilson, Kira Poutanen, Aidi Vallik, Anna Gavaldas and Latvian writers. As a rule, "The Children's Jury" always consisted of more girls than boys, and their voices have determined the choice. There appear no winners in other genres and kinds of literature, for example, in the poetry genre although there are several hundreds of readers who have given preference to the poetry books included in the collection. For example, in the year 2007 there were included two collections of poems in the collection of "The Children's Jury" for the age group Grades 8 - 9 - 159 girls (8%) and 22 boys (6%) voted for the collection "The Touch of Rain Drops" written by Māris Melgalvs, 92 girls (5%) and 14 boys (4%) voted for the book "The Horses of Atgāzene Station" written by Inga Ābele.

The specific character of poetry requires greater experience of the reader – the reader has to feel and perceive the subtext, the play between direct and figurative meanings, the nuances of the feeling. There is no doubt that reading poetry develops reading competence and that interest in it should be stimulated both in education of literature and in different other projects and programmes concerning the promotion of reading.

In order to clarify the learners' literary interests and reading motivation the authors of the article arranged an interview with the learners of Grades 8 -9 in the spring of 2011. There participated learners of several Riga schools: learners of Grade 8 - 54 (30 girls and 24 boys); learners of Grade 9 - 38 (20 girls and 18 boys).

Answers to the question "**What literary genre do you prefer to read most?**" with given variants of answers – stories, novels, literary fairy-tales, poetry, plays, folk-tales, another variant – testify to the fact that the most popular genres among both the girls and boys are stories and novels, while poetry and drama are not popular among the adolescents. This fact assigns the task for the teachers to pay special attention to reading literature of this kind in order to enlarge their experience. In Latvia it is a rather difficult task because there are very few editions of poetry and plays for adolescents and the youth (Figure 1).





Answers to the question **"What subject matter books do you prefer?"** with given variants of answers – fantastic events, adventures, detective stories, friendship, love, school life, history, journeys, the virtual world, nature, animals, another variant – show that girls prefer books about friendship and love, but boys prefer books about fantastic events. Both boys and girls have interest in adventures, fantasy and adventure literature (Figure 2).

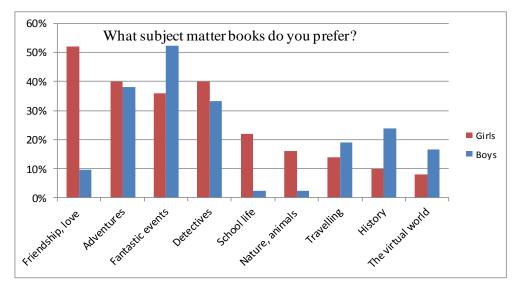


Figure 2. Learners' answers to the question "What subject matter books do you prefer?"

The results of the interviews show similar tendencies to the study of the choice of the reading material among boys and girls (up to the age of 16) in German speaking countries. (Garbe, 2007). The authors of the study conclude that girls most frequently choose works of art about relations, love, animals, stories in the centre of which is the fate of man, psychology. Girls love to read with empathy and be emotionally involved and they choose works of real character with which they can identify themselves. Boys in their turn most frequently choose works of art, which are characteristic of strained action and secrets – fantasy, scientific fantasy, adventures, travelling. Boys like to read about facts, to keep a certain distance from the material they are reading, they like to make themselves thoroughly at home with the unknown, fantasy and exotic worlds. Boys like humour, jokes, parodies and all kinds of ridiculous exaggerations. (Garbe, 2007).

The answers at the interviews lead to the conclusion that one cannot be absolutely categorical about the difference between the interests in the themes among boys and girls, it is important to understand what boys and girls pay the main attention to.

Answers to the question **"How do you choose a book for reading?"** show that an essential role in the choice of books is played by the design of the cover, the annotation, the themes and the genre. Of little importance are the suggestions to read a particular book – there appears no role played by parents, teachers, librarians, learners of the same age. Thus, the conclusion is that not enough attention is paid to popularization of the latest literature and reading, as well as the fact that books have been spoken about and discussed too little in the families and among the adolescents (Figure 3).

Answers to the question "Name a book which to your mind is worth reading for others" show that

- the most frequently are named books of the adventure and fantasy genre, which are popular among the youth – the trilogy "The Hunger Games" by Suzanne Collins, "Twilight" by Stephanie Meyer, "The Lord of the Rings" by John Ronald Reuel Tolkien, the series "Harry Potter" by Joanne K. Rowling, the series "Stalker", the cinema stories "Pirates of the Caribbean", and others;
- there are also named stories and novels about the life of the youth, their relations and their problems "The Orange Girl" by Jostein Gaarder, books by Brigitte Blobel;
- there are named many works from literature textbooks "Sprīdītis" ("Tom Thumb") by Anna Brigadere, "Fairy-tales about Flowers" by Anna Sakse, the epos "Lāčplēsis" by Andrejs Pumpurs, the short story "In the Shadow of Death" by Rūdolfs Blaumanis, "A Human Child" by Jānis Klīdzejs, "The Story about Tille and the Man of Dogs" by Andra Neiburga, "The Captain's Little Girl" by Alexander Pushkin a. o;
- there are also named several works of the world classical literature "The Little Prince" by Antoine de Saint Exupery, "Robinson Crusoe" by Daniel Defo, "The Three Musketeers" by

Alexander Dumas, "Sherlock Holmes" by Arthur Conan Doyle, "The Picture of Dorian Gray" by Oscar Wilde, "White Fang" by Jack London, "The Adventures of Tom Sawyer" and "The Prince and the Pauper" by Mark Twain, "An American Tragedy" by Theodore Dreiser, a. o.;

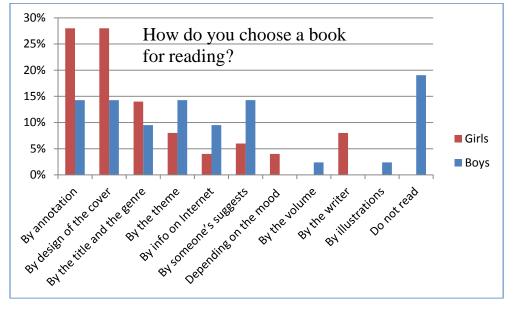


Figure 3. Learners' answers to the question "How do you choose a book for reading?"

- the learners name comparatively few books by Latvian authors several times are mentioned books by Māris Rungulis, once – books by Dace Šteinberga and Laima Muktupāvela respectively;
- two learners suggest reading the Bible;
- there are also mentioned books read in their childhood "Winnie-the-Pooh" by Alan Milne, "Pippi Longstocking" by Astrid Lindgren, the fairy-tale "The Three Little Pigs" by the Brothers Grimm, "The Spiderwick Chronicles" by Tony Di Terlizzi and Holly Black a. o;
- the learners chiefly remember only the titles of the books, but not the authors.

The authors have come to the conclusion from the analysis of the learners' answers that to a great extent it is advertisement, fashion that draws the readers' attention to particular books. In this case interest to read a book is an encouragement to read it in the original, for example, in English, not waiting for the translation. (Part of the learners mention that they have read books in English.) A strong stimulus for reading is the depiction of the work of art in other kinds of art, for example, the cinema. The named classical works of the world literature are indicative of it, as their greatest part has been screened. The fact that so many works of art included in the textbooks or read in the childhood are named could testify to it that the experience range of the learner - reader is generally narrow.

The learners' answers to the question "**Why do you read books?**" reveal the most characteristic reading motives:

- the majority of all the girls (42%) and boys (31%) answered that they read because they like reading and it is fascinating;
- a serious motivation of reading is to get to know something new (18% of girls, 21% of boys);
- reading is an essential way of spending one's spare time 18% of girls, 12% of boys.
- 8% of he interviewed girls and 21% of the interviewed boys assert that they do not read at all. For example, a girl of Grade 8 answered: "I don't read, I like novels, but I don't know their titles."

The clarification and the observation of the learners' literary interests and their motivation to read serve as a stable basis for working out exciting teaching/learning aids in literature. It is also stressed in the standard of the subject "Literature" for Grades 4 - 9 that the aim is to further broaden the learners' literary interests: "to promote the emotional and intellectual development of the learners by improving

the perception of literature as art of words, the learners' literary interests, imaginative thinking and their creative self-expression." (Regulations of the state standard.., 2006). When working out teaching/learning aids there should be included all the components of the compulsory content of the subject: 1) literature as an art of words; 2) perception of the literary work, creative activity; 3) literature as a component of culture. (Regulations of the state standard.., 2006).

The authors of the article have observed the following principles in the process of drawing up the content of the complete set of the teaching/learning aid "Literature Form 9" (Kalve, Stikāne, 2011):

- 1. the adequacy of the folklore compositions and literary works to the peculiarities of the learners' age group, their literary interests and needs:
- there are chosen literary works, the heroes of which are peers of the learners of Form 9 ("Patricia's Diary" by A. S. Gailīte, a. o.), real heroes within both the historical and contemporary context ("Lāčplēsis" by A. Pumpurs, "The Hunger Games" by Suzanne Collins a. o.);
- the plot is connected with the processes of our contemporary real life, which are well-known to the reader, relations with the parents, peers, teachers, the animal world), adventures, heroic deeds in struggles;
- the fragments included in the teaching learning aid reflect problems, topical for the adolescents.
- 2. respect for the sex and ethnical differences there are chosen works of art depicting both girls and boys and their feel of the world;
- 3. conformity with the topicality of the age there have been chosen works of art, the content of which includes urgent and significant themes and values of today: the idea of freedom and of the people and the individual, the family, relations in the family, survival in extreme situations, the relations between the material and spiritual values;
- high artistic value there are chosen high-quality classical and contemporary literary works, for example, poetry by Rainis, A. Čaks, O. Vācietis, plays by Anšlavs Eglītis, literary fairy - tales by Shaun Tan;
- 5. the potential of promoting culture dialogue, tolerance there are chosen literary works, which contain information, which the learners could make use of for the development of the needed knowledge and skills not only in internal but also intercultural dialogues, for example, the common and the different in myths of different peoples a. o.;
- 6. the diversity of genres, themes (special attention is paid to the less popular kinds of literature poetry and drama).

The principles of methodological approaches of critical thinking make up the basis of the methodological system of the teaching/learning aids, which promotes the learners' motivation to read, involves them in active cognitive and creative activity, favours the comprehension and perception of art, develops their cooperation skills. The system of the principles of critical thinking – stimulation, comprehension, reflection has been observed both in the structure of the chapters and when grouping separate tasks.

"It is in our power to expand the borders of the republic of reading," writes the poetess Inese Zandere (Vilcāne, 2011) and one of the ways of doing it is to make up teaching/learning aids for developing reading.

#### Conclusions

- 1. The evaluation of the books included in the collection of the reading promoting program "The Children's Jury" during the period of five years (2006 2010) shows that the literary interests of senior adolescents are consistently connecter with two genres fantasy and scientific fantasy novels and stories and novels depicting real life.
- 2. Although the learners' answers in the interview show that there exist differences between the choices of boys and girls concerning the themes, interest in adventures, fantasy and detective literature is characteristic of both boys and girls.

- 3. When advertising and suggesting books for reading it is especially important to emphasize their subjects and the genre, as well as to draw the learners' attention to the design of the cover.
- 4. When promoting reading a significant place should be devoted to talks and discussions on the themes in literature, which are topical for the young people.
- 5. When promoting the learners' interest in reading it is significant to pay attention to the reflection of the work of art in other kinds of art, which are close to the learners of the corresponding age group.
- 6. The following principles should be observed when drawing up the teaching/learning aids which are compulsory for the learners: the compliance of folklore compositions and literary works with the peculiarities of the learners' age group, their literary interests and needs, respect for the learners' sex and ethnical difference; compliance with the topicality of the epoch; high artistic value; the potential of promoting the dialogue of cultures and tolerance; diversity of genres, styles and themes.
- 7. Regular reading of fiction, which is diverse in the genres, styles, themes develops one's reading competence, and interest in reading should be stimulated both in classes of literature and different projects and program connected with promoting reading.

#### References

- Belickis I., Blūma D., Koķe T. ... (2000). *Pedagoģijas terminu skaidrojošā vārdnīca*. (Explanatory dictionary of pedagogy terms). Zvaigzne ABC, Rīga, Latvija, p. 83, 105. (In Latvian).
- Garbe C. (2007). Lesen, Sozialisation, Geschlecht: Geschlechterdifferenzierende Leseforschung und – förderung. (Reading, socialization, sex: a study of reading depending upon the differentiation of sex and advancement). In Lesekompetenz – Leseleistung – Leseförderung: Grundlagen, Modelle und Materiallen. Seelze- Velber, Kallmeyer, Deutschland, p. 66-82. (In German).
- Geske A., Grīnfelds A., Kangro A., Kiseļova R. (2010). Ko skolēni zina un prot competence lasīšanā, matemātikā un dabaszinātnēs: Latvija OECD valstu Starptautiskajā skolēnu novērtēšanas programmā 2009. (What learners know and what they can do – competence in reading, mathematics and natural sciences). LU PPMF, Rīga, Latvia, p. 10, 13, 19, 75. (In Latvian).
- 4. Geske A., Grīnfelds A., Kangro A., Kiseļova R. (2007). *Kompetence dabaszinībās, matemātikā un lasīšanā ieguldījums nākotnei*: Latvija OECD valstu SSNP. (Competence in natural sciences, mathematics and reading investment for the future) LU, Rīga, Latvia, p. 97. (In Latvian).
- 5. Gudakovska I. (1997). *Mūsdienu pusaudžu lasīšanas intereses kā personības attīstību rosinošs factors*. (The reading interests of contemporary adolescents as a contributory factor for the development of a personality). Promotion Theses. LU, Rīga, Latvia, p. 6. (In Latvian).
- 6. Ivey G. (1999). A multi case study in the middle school: complexities among young adolescent readers. *Reading Research Quarterly*, 34, Nr. 2 p. 172-192.
- Kalve A., Stikāne I. (2011). *Literatūra 9. klasei*. Mācību grāmata. Darba burtnīca. Skolotāja grāmata (Literature, Form 9. Textbook. Workbook. Teacher's book). Pētergailis, Rīga. (In Latvian).
- 8. Linnakylä P., Malin A., Taube K. (2004). Factors behind low literacy achievement. *Scandinavian Journal of Educational Research*, 48, Nr. 3, p. 231-250.
- 9. Noteikumi par valsts standartu pamatizglītībā un pamatizglītības mācību priekšmetu standartiem. (2006). (Regulations on the state standard in basic education and the standards in the subjects of basic education), [online] [20.11.2011]. Available at http://www.likumi.lv/doc.php?id=150407&from+off (In Latvian).
- 10. Vilcāne V. (2011). Lasīt ir prieks. (Reading is pleasure) Ieva, 13.jūl. p. 44-47. (In Latvian).

# COMPARING THE NORDIC COUNTRIES' AND THE ESTONIAN CRAFT SYLLABUSES. SIMILARITIES AND DIFFERENCES

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**Abstract:** The article is a part of my PhD thesis "Didactic and methodological conditions for forming students' applicability of knowledge through integrating craft and science in compulsory school". The aim of the article is to discuss the Craft syllabuses of the Nordic countries and Estonia. The article tries to show the essence of teaching Craft in different countries through the analysis of the syllabuses. A try to find the development trends written in the Craft syllabuses and identify the position of craft and its importance in the Nordic and Estonian comprehensive education is also described. Therefore, the author is in search of answers to the questions: are the Nordic countries' and Estonian Craft syllabuses similar or different? How different or similar are they? What are their similarities or differences? What are the aims of the different Craft syllabuses? The craft syllabuses valid in 2008 in sample countries are taken as the basis of the analysis.

**Keywords:** syllabus, similarities, differences, craft education, structure of syllabus.

#### Introduction

The tremendous speed of the technological development and different technological paradigms has made it complicated to predict how the world will be in five or ten years. Because of that schools are expected to assume a role in helping children to cope with this complexity (Schleicher, 1991). Due to that, in different countries the content of comprehensive education and craft is tried to develop so that it would be up-to-date and would prepare today's students for coping with new situations of their everyday life in the adulthood.

To understand better the developments in Craft in different countries, the process of Craft development in the countries should be observed briefly. It can be said that the chief impulse for the development of handicrafts as a school subject emanated from the central European countries, first in Bohemia and Germany in the seventeenth century motivated by philanthropic sentiments. (Schleicher, 1991) Craft in Nordic countries originates from the ideas of the founder of the Finnish Folk School Uno Cygneaus in 19th century and the Finnish Folk School. In 1866 the Czar approved the Law for the Finnish Folk School. For the first time in the world Handicrafts was a subject in general education. (Kananoja, T, 2004). Craft started to develop in Sweden in 1875 in Nääs Sloyd Teacher College where leader was a self-educated teacher of Jewish origins Otto Salomon (Thorbjörnsson, 2006). The experience of Nordic countries spread quickly to Estonia which was a part of the Tsardom of Russia. Nordic craft did not reach Estonia in its original way but adjusted by the teacher of St. Petersburg Teacher's Institute K. Cirul. For instance, in Russian system drawings and drafts were taken into use and it helped instruct simultaneously different work in the classroom. Craft as the school subject in Estonia obtained the right to live in 1894 by the law of the Tsardom of Russia. (Lind, 1997)

As it can be seen, the directions in craft subject started to differ in these countries at the beginning of its development and the particular influence is felt even nowadays. The objectives, the content, and the teaching practices of crafts are still more depended upon tradition and interest of individual states than upon academic criteria. Furthermore, they are moulded by national and regional condition of school system rather than by international forums (Schleicher, 1991). For example in Sweden the curriculum, syllabus and school plan allow the principals, teachers and pupils of individual schools the flexibility to adapt content, organization and work methods to local conditions (Borg, 2006). Schools enjoy a relatively great freedom in articulating the study of crafts, since they are seldom offered continuously across all grade levels (Schleicher 1991).

Although the analysis of the present article deals with regionally relatively close countries' Craft syllabuses in comprehensive schools of Nordic countries and Estonia, the names of the subject are dissimilar. For example, the name of the subject in Denmark and Sweden is Sloyd (Sløjd, 2004; Syllabuses..., 2008), Sloyd is the English translation of the Swedish word *slöjd*, when it is used in

educational contexts as the name of a compulsory school subject (Borg 2006). In nowadays Norway is taught subject as Art and Crafts since 1997 when the name of the subject changed from Forming to Art and Crafts (Digranes, 2009). In Finland the subject name is *Käsityö*, which is translated as Crafts (National..., 2004). The subject name in Estonian schools was Craft and Technology until 2011, nowadays it bears the name of Technology. It should be added that in Estonia the mentioned subject includes mainly the study based on wood and metal technology. For textile work there is a separate syllabus called Käsitöö which is not analysed here. So it can be said that the Estonian name for the subject of Craft is the most confusing as for instance, Technology is a separate subject in Sweden and Denmark. Craft as the subject's common name is used in the article since the multiplicity of the subject's names and it bases on the fact that mostly it is a subject where students do practical work by hand.

The directions in Craft are also distinct in different countries. For instance, in Nordic countries the focus is on the needs of the individual so while seeking new principles of education we should base on the person not the present needs of society. Danish researcher Bent Illum (2005) claims that it was possible to describe a person's competence towards the society before, now it should be done towards the specific person. The same is also in Craft. The comparison of syllabuses in different countries ought to help explain the developments and prospects of Craft.

#### Materials and methods

The present article bases on the analysis of main objectives of Craft syllabuses in five countries-Estonia, Finland, Sweden, Denmark and Norway. The syllabuses valid in 2008 are used for the analysis. For now, new syllabuses are valid in some countries (Estonia, Denmark) and it gives a great opportunity to check later directions of development. However, the present analysis does not take into consideration further developments but remains into specific time period.

Following research questions are raised in the article:

- What do the objectives of craft in Nordic countries and Estonia seem to be according to the syllabuses?
- Which similarities and differences are there in the objectives of the syllabuses in Estonia and Nordic countries?

The author seeks answers to the research questions analysing the structures and objectives of the syllabuses.

The qualitative research method has been used in benchmarking the syllabuses where the objectives of syllabuses were categorized into groups according to Gagne's categories of learning outcomes (Gagné & Driscoll, 1992): verbal skills (for example, a skill to justify and defend his/her ideas), intellectual skills (knowledge of safety requirements), cognitive strategies (seeking solutions to problems), attitudes (readiness to do something manually) and motor skills (using different methods of work). The general structure of the syllabuses was also studied and the content of the syllabus was divided into categories (the explanation of the essence of the syllabus, main objectives, the objectives for age groups, core content, subject blocks, learning outcomes in age groups and basis of assessment) which allows to compare the structure and the details of syllabuses in different countries.

The objectives of cathegorized syllabuses allowed to determine the internal ratio of different categories and thus it was possible to subordinate data to the quantitative descriptive analysis. The analysis of various sources of literature helped to find the countries' Craft foundation that determines the country's theoretical basis and the directions of Craft development. These theoretical bases together with subject blocks were taken as the basis for creating categories.

At the point of criticality, it has to be said that the keyword categorization of objectives has certainly changed and simplified the meaning of some objectives so that some deviations from the syllabus author's ideas could emerge. There could be the second deficiency: within the syllabus its objectives and content were not compared. Therefore it might happen that some essential keywords were not mentioned in the objectives of the syllabus but the content of the syllabus compensated it. It indicates that not all syllabuses are syllabuses where the content and the objectives always coincide. Because of that, an important keyword which was discussed in the content might not be analysed.

#### **Results and discussion**

*The structure of the crafts syllabuses.* To get a better overview of the similarities and differences in different countries' syllabuses it is necessary to study their structure. Analysing the syllabuses' components of the content it can be admitted that not all syllabuses' structures are completely similar. The following table gives a better overview of the structure of different countries' syllabuses.

Table 1

Categories	Estonia	Finland	Sweden	Denmark	Norway
Explanation of the subject's essence	X	X	Х	Х	
General objectives	X		X	X	X
Aims of age groups		Х	Х	Х	Х
Core content	X	Х		X	
Topics	X			X	Х
Learning outcomes of age groups	X	Х			
Final learning outcomes		Х	Х		
Basis of assessment	X	Х	Х		Х

#### Syllabi structures

It is rather widespread that there is an explanation of the essence of the subject in the introduction of the syllabus (except for Norway) where the main objectives of the subject, its part in education, descriptions of the learning methods etc are presented. For example, it is said in Swedish syllabus, *The subject of Crafts helps the pupils' all-round development by training their creative, manual and communicative abilities*"(Syllabuses,2008).

One characteristic in Nordic countries' syllabuses is to give the objectives in the age groups which are not common to Estonia. The learning outcomes for the age groups are presented in Estonian syllabus. It can be said that the objectives of the subject and the learning outcomes carry the same meaning- the result which will be achieved during the process of learning. Finland differs from the other countries as both mentioned are described in the syllabus. It can be seem as an unnecessary repetition. For example the objectives of the junior level "learn, as individuals, to evaluate and appreciate their own work and the work of others" and in description of good performance at the end of fourth grade is said, "evaluate and appreciate, as individuals, their own and others' work, learning, and work results" (National..., 2004).

School levels or grades when the objectives or learning outcomes are presented differ across countries. In Estonia at the end of 6th and 9th grades (Põhikooli..., 2002). In Finland at the end of 4th and 9th grades (National..., 2004). In Sweden at the end of 5th and 9th grades (Syllabuses, 2008). In Denmark the craft is taught from 4 to 7 grades attending one or more courses and the specific objectives have to been developed by the municipal level according to the final objectives and certain grades where craft is taught. (Sløjd, 2004). Norwegian syllabus gives the intermediate targets four times- after the 2nd, 4th, 7th and 10th grades. (Arts..., 2008).

An important part of the syllabus is the learning content that determines the learning activities using which the final objectives or learning outcomes have to be achieved. Learning content in details is given only in Estonian Craft syllabus. The teacher has a choice to decide how extensively and deeply he/she deals with keywords. (Soobik, 2001). Learning content has been written off in Finnish and Danish syllabuses but in a different way. In Danish syllabus the positions of Craft in the learning content is written in a descriptive way using phrases: students are encouraged, inspired, promoted etc (Sløjd, 2004). Finnish syllabus gives general directions in age groups describing the learning content (National..., 2004).

A significant difference between Nordic and Estonian Craft syllabuses reveals in different approaches of types of work and subject blocks. For example, only Estonian syllabus determines different types of work which could be used in Craft and regulates the number of taught types of work. This kind of limitation is not found in other syllabuses.

From Danish and Norwegian syllabuses division into subject blocks as it is done in Estonia can be found. According to Estonian syllabus, students have to cover six subject blocks which include basic information for any practical work. The subject blocks concernin the basis of craft are following:

history of technology, technical literacy, giving shape and technical creation, processing materials, coating finish and handling electrical hand tools. (Põhikooli..., 2002).

The subject blocks in Danish syllabus support and also confirm every logical step of producing a product. These are central skill and readiness areas: *design and a product, knowing material and tools, cultural techniques, creation processes.* (Sløjd, 2004).

Norwegian syllabus is divided into four subject blocks: visual communication, design, art and architecture. The blocks are required to cover during the course. The learning outcomes of the subject blocks are described similar to Estonian syllabus. (Arts..., 2008).

Student evaluation in craft deserves separate analysis. Craft in Nordic countries values especially student's self-evaluation and all studied syllabuses stress that student's self-evaluation is the essential part of the working process. A specific topic in Finnish syllabus is self-evaluation and considering of the process where the student's evaluation skills and attitudes are pointed out (National..., 2004). Evaluation is mostly covered in Swedish syllabus where it can be found in the explanatory part *"Evaluation is an important part of the craft process. Pupils report on how inspiration, ideas, design and different views have influenced the result. By this means they develop their ability to assess, evaluate and draw conclusions from their work"* (Syllabuses, 2008). Besides, there is a separate chapter about evaluation of work and the product is the teacher's competence leaving out the importance of students' self-evaluation. *3.4. In evaluation process the teacher's oral and written assessment is important...* (Põhikooli..., 2002)

Summing up, it can be said that Nordic countries' syllabuses are relatively similar and stand out clearly from Estonian syllabus as the process is directed towards the achieving the aim of the learning. Learning content is also placed under the objectives. On the other hand, Estonian syllabus is relatively study result-centred and it impacts much more repressing and obligation-centred.

*Similarities and differences of main objectives.* The most important part of the syllabus is the aim of the subject. The objectives give us knowledge about the essence of the subject, the field of study and its development. Studying the objects raised in Craft we can learn what was considered to be important while teaching the subject and what is wanted to achieve after learning. We have to admit that the objectives in craft are relatively similar in Nordic countries. All of them are directed at student's coping with everyday life and problems. Naturally, there are changes of direction which are typical of Nordic countries. For example, when previous Swedish syllabus concentrated more on practical work, materials and different methods, then the present syllabus involves clearly the process of handicraft as a specific dimension in learning. (Slöjd, 2007). Figure 1 presents the learning outcomes resulted from the subject's objectives in all studied countries.

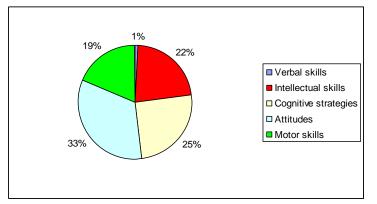


Fig 1. Percentages of the types of learning outcomes in syllabuses

Describing the main objectives of the subject is common to almost all syllabuses of Nordic countries except Finland. (Table 1) The main objectives of the subject are especially important in terms of the article because the benchmarking of the syllabuses bases on the objectives. To compensate this discord, the general introduction part of the Finnish syllabus was used in the analysis. A statement from Finnish syllabus as an example *"The task of instruction in crafts is to develop the* 

Table 2

pupils skills with craft so that their self-esteem grows on that basis and they derive joy and satisfaction from their work "(National..., 2004).

Categorized objectives according to Gagne's types of learning outcomes showed clearly that the emphasis in syllabuses is on the development of the students' attitudes. The percentage of attitude compared with other types of learning outcomes makes 33 percent of the whole quantity of objectives (Figure 1).

As an example here is an objective from Danish syllabus, "Paragraph 2. The student's fantasy, pleasure of creation, experimenting and analysing attitude is developed through the thorough attitude towards the working process of the product in order to put student's trust in self-confidence and his/her abilities. (Sløjd, 2004).

**Types of learning** Verbal Intellectual Cognitive Attitudes Motor outcomes by Gagné skills skills strategies skills Estonia 0 8 13 33 6 6 Finland 0 3 2 7 2 14 Sweden 5 15 1 1 4 4 Denmark 0 3 3 4 2 12 Norway 0 8 4 4 22 6 1 21 24 32 18

Learning outcome types

Next, cognitive strategies follow in which it was important to analyse, think, solve problems, plan etc. After that, intellectual skills or knowledge come. Estonian syllabus was the only one where intellectual skills were mentioned more often than cognitive strategies among objectives (Table 2). It shows clearly that Nordic syllabuses are aimed at understanding more than acquiring theoretical knowledge.

Naming motor skills less in objectives of syllabuses indicates that the subject of craft is not oriented to acquiring purely practical skills any more. Understanding the process of work, planning it, evaluation of your choices and cognition of materials have become more important. (Broge, 2005).

An interesting result of verbal skills or communicative competence can be seen. It is considered important only in Swedish syllabus. However, lots of references to verbal skills are found in the contents of other countries' syllabuses. For example, it is said in the content of the architecture part in Norwegian syllabus"...the pupil shall be able to talk about streets, squares and buildings with different functions in the local environment" (Arts..., 2008).

To get a better overview of general objectives of the syllabuses, we should study what kind of types of knowledge, skills and attitudes are mentioned in different syllabuses. All these coded keywords are collected into Table 3. It appears from the coded objectives of the syllabuses of Nordic countries and Estonia that several focuses and important thematic centres emerge from the differences and similarities.

It becomes obvious from the analysis of the table that the most essential and common similarities between syllabuses include creativity and design. It indicates that the subject of craft where models, sample products and similar drawings with the detailed description of the working process were used is a thing of past. Modern craft is directed to individual and original work where the shape, materials and working process of the product needs previous rethinking.

The second connecting thing in syllabuses is handicraft culture and traditions. These keywords are written to all syllabuses. Valuation of national handicraft culture is the backbone of the subject of Craft since it does not let forget our cultural assets and keeps us near our ethnic roots in the world of globalization and technology. Nordic syllabuses explicit the connection between craft and cultural heritage and its protection, seeing a task of developing interest and understanding in creative and handed work through introduction to the cultural heritage and the traditions of handicraft's historical and cultural sides.

The main learning method in Craft is learning through practical handed activity. One of the objectives in Danish syllabus states "Paragraph 1. The aim of teaching Craft is to acquire skills and readiness for creating something using hands" (Sløjd, 2004). Handicraft skills and motor skills as objectives are mentioned in all syllabuses' objectives. Important knowledge is that Craft gives an opportunity to make something manually. It is using and developing sensomotoric. There is the direct connection between the growth of student's self-confidence and coping with everyday life where a person has the courage to make something practical without needing a handyman. According to Bent Illum, it is a natural part of our culture so called ,, operating culture", "handicraft culture" (2005). One of the most essential differences between Estonian and Nordic syllabuses is a principle approach to the whole practical activity. Swedish and Danish syllabuses prioritize the process of creation from the beginning to the end as a whole. From the Swedish syllabus, "A typical process starts from an idea and results in a finished product" (Syllabuses, 2008). In Danish syllabus the aim is that the students have to be able to understand the whole process from the idea to the evaluation. (Sløjd, 2004). Estonian syllabus says laconically "the student learns to think, seek the solutions, test, analyse knowledge and adapt skills in order to implement his/her original ideas practically using capably modern materials, tools and resources."(Põhikooli..., 2002)

Table 3

Categories/Countries	Estonia	Finland	Sweden	Denmark	Norway
creativity/technological creation/design	Х	Х	Х	Х	Х
Handicraft culture and traditions	Х	Х	Х	Х	Х
Handicraft skills/motor skills	Х	Х	Х	Х	Х
Self-confidence	Х	Х	Х	Х	
responsibility/thoroughness	Х	Х	Х	Х	
Joy /self-realization/ initiativeness	Х	Х		Х	Х
Teamwork	Х			Х	Х
Self-sufficiency/ planning while	Х	Х	Х		
working					
Aesthetics and ethics	Х			Х	Х
Functionality	Х			Х	Х
Tools /using tools	Х		Х		Х
Solving problems		Х	Х		Х
Everyday life and technological	Х	Х		Х	
phenomena					
Work assessment/analytical skill	Х	Х	Х		
Process from the idea to the product			Х	Х	
Craft materials	Х				Х
Creating integrative knowledge	Х		Х		
Safety and work health	Х		Х		
Job training/enterprising	Х				Х
Gender equality			Х		
IT-tools			Х		
Communication skills			Х		
Hobby education			Х		
Technological knowledge	Х				
Environment/economy	Х				
Teaching art					Х

Aims of subjects categories

Analysing the syllabuses it appears that students' pleasure to work and satisfaction through practical activities are considered to be very important. Finnish syllabus says, *"The task of instruction in crafts is develop the pupils' skills with crafts so that their self-esteem grows on that basis and derive joy and satisfaction from their work*"(National..., 2004). We can find from Danish syllabus that experience, game, joy and challenge expressing their own ideas through the process of design and using materials of the subject until the product is ready are basic and really important. (Sløjd, 2004). It

is also noted that *"through the subject a vision of future society needs, further education and career opportunities are created in the positive learning environment* "(Põhikooli..., 2002). Positive learning environment reveals here the other meaning bringing out clearly the direction of the Estonian syllabus to develop a student in order to fulfill social needs and expectations rather than support a child as an individual.

#### Conclusion

In conclusion, it can be said that the comparison of syllabuses clearly indicated that craft syllabuses in different countries vary in their content and structure. Their difference appears due to national traditions and local education policy. One of the reasons of similarity could be the same origin of Craft.

Major common elements in syllabuses of Nordic countries and Estonia cover developing creativity, knowing and saving local national handicraft culture and also practical manual activity as the developer of sensomotoric and self-confidence.

One of the most important differences in syllabuses of Estonia and Nordic countries lie in the levels of linguistic communication competence and students' evaluation. That is, the syllabuses of Nordic countries consider important student's self-assessment, the ability to express his/her ideas, working process and his/her decisions. In Estonia Craft is still taught in a relatively teacher-centred way ie there are not long discussions about working processes with students and their opinion is not asked. Lastly, moving more and more towards being technology education-centred and rejecting its Nordic roots can be noticed in Estonia.

#### References

- 1. *Arts And Crafts Subject Curriculum* (2008) Norwegian Board of Education [online] [2011.11.07]. Available at <u>http://www.udir.no/Stottemeny/English/Curriculum-in-English/\_english/Common-core-subjects-in-primary-and-lower-secondary-education-/</u>
- 2. Gagné, R. M., Driscoll, M. P (1992) Õppimise olemus ja õpetamine (The nature of learning and teaching) /; [inglise keelest tõlkinud E. Krull].Tartu: Tartu Ülikool. (In Estonian)
- 3. Borg, K (2006) What is sloyd? A question of legitimacy and identity. *Tidskrift för lärarutbildning och forskning* nr 2–3, p 34-51.
- Broge, G (2005) Tööõpetuse õpetaja kui väärtusisik (The value of craft training teacher' personality). Rmt. Tammar, T. (Koost.). *Tööõpetust on vaja* (Craft training is needed). Tallinn: Ilo, 17-27. (In Estonian)
- 5. Illum, B. (2005) Milleks on tavakoolis vaja käelist tegevust/tööõpetust? (Why the handicraft skills are nedeed at school?) Rmt. Tammar, T. (Koost.). *Tööõpetust on vaja*. Tallinn: Ilo, 5-16. (In Estonian)
- 6. Digranes, I (2009) The Norwegian School Subject Art and Crafts- Tradition and Contemporary Debate. FORMakademisk Vol.2, p 26-36.
- 7. Kananoja, T (2004) Uno Cygnaeus and Russia. *Technology Education conference in Turku*, Turku University, Turku, Finland
- Lind, E (1997) Töökooli ideede levik Eestisse 19. sajandi lõpul ja 20. sajandi alguses.(The spread of the ideas of "Arbeitsschule" in Estonia at the end of the 19th century and at the beggining of the 20th century) Lind, E; Vihma; H. (Toim.) *Tallinna Pedagoogikaülikooli Toimetised Humaniora A7* (Tallinn Pedagogical University Proceedings Humaniora A7). Tallinn: Tallinna Pedagoogikaülikool, 17-28. (In Estonian)
- 9. *National Core Curriculum for Basic Education* (2004) Finnish National Board of Education. Vammala: Vammala Kirjapaino Oy
- 10. *Põhikooli ja gümnaasiumi riiklik õppekava* (The national curriculum for basic and upper secondary schools) (2002) Riigi Teataja I.\_ 20, 116. (In Estonian)
- 11. *Sløjd. Faghæfte 10* (Craft. Booklets 10) (2004) Undervisningsministeriet, Uddannelsesstyrelsen, Område for Grundskolen. (Ministry of Education, National Education Authority, Area of Basic School). Scanprint AS (In Danish)
- 12. Schleicher, K (1991) Handicrafts. Lewy, A (Edit.) *The International Encyclopedia of Curriculum*. Israel: Pergamon press. 694-698.
- 13. Soobik, M (2001) Tööõpetus teel uude sajandisse (Craft training on its way into the new century). Õpetajate Leht (Teachers' Page), 05.01. (In Estonian)

14. Syllabuses for the compulsory school (2008) Swedish National agency for education: Skolverket Slöjd. En samtalsguide om kunskap, arbetssätt och bedömning (The guide on knowledge, methods and assessments) (2007) Edita Västerås (In Swedish).

#### DEVELOPING FUNCTIONAL LITERACY IN CRAFT LESSONS IN THE 1ST STAGE OF STUDIES

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**Abstract:** The article analyses the need and possibilities for working with texts in the Craft lessons in the 1<sup>st</sup> stage of studies. The Estonian national curriculum for basic schools elicits communicative competence as one of the fundamental competences. Communicative competence is historically related to cultural norms, including the ability to read and to understand informative texts and operational texts, prize grammatical correctness and expressive speech. The Pisa 2009 survey showed that the level of functional literacy of Estonian children is rather good: Estonia held the 5<sup>th</sup> position in Europe and the 13<sup>th</sup> position among all the participating countries. One possibility to achieve the competence is to teach pupils to work independently on a text also in practical subjects. In order to get an overview on how and whether pupils are able to independently interpret practical assignments with the help of written instructions, a pertinent test was carried out among pupils. The results showed that 80.4% of the respondents considered independent work with a text accomplishable and understandable.

**Keywords:** craft, working with a text, independence.

#### Introduction

Literacy is a phenomenon variable in time and thus also the content and criteria used to define it have changed in history. The definitions of reading and literacy have changed through shifts in the society, economy, and culture (Tire et al, 2009). The formation of literacy skills holds a critical importance in school success; it has always been considered as the key issue in learning (Pandis, Vernik-Tuubel, 2004). In the era of technology requirements on literacy have only grown, causing progressively more problems for underachieving students (Stedman, Kaestle, 1987). One of the research objects of the PISA test – a survey assessing pupils' skills necessary for coping in the society – is reading literacy (OECD Programme for International Student Assessment, (PISA, 2009)). According to the PISA 2009 definition reading literacy is understanding, using, reflecting on and engaging with written texts in order to achieve one's goals, develop one's knowledge and potential, and to participate in society (Tire et al, 2009). Based on the PISA 2009 reading literacy results Estonia held the 13<sup>th</sup> position among all the participating countries, which is the same as in 2006; in Europe Estonia held the 5<sup>th</sup> position (PISA, 2009). In 2006, Estonia held the 8<sup>th</sup> position in Europe, which means that in 2009 Estonia went up 3 places. It was the first time for Estonia to be represented among the OECD countries and it held the 10<sup>th</sup> position (Tire et al, 2009).

Oral and written speeches differ in many aspects. Due to the traditions of the written language and the organisation of language the written language is more conservative and more bound to linguistic rules than the spoken language. In a lesson a teacher mostly uses the spoken language (oral methods) to achieve didactic objectives. The oral presentation could be addressed to the class as a whole, to a group or to an individual pupil. Erkki Lahdes (Lahdes, 1997) calls such a presentation of teaching materials realizing academic objectives, where pupils are assisted in acquiring certain knowledge. In case of oral presentation the teacher can influence different aspects of pupils' personality or focus solely on influencing certain qualities. However, there is a risk that teachers may get carried away in a long monologue and be too general, without pointing out the most important aspects. Another disadvantage of oral instructions could be excessive expounding of the teaching material by the teacher, i.e. becoming too detailed, which could result in hindering pupil's creative approach to a task.

In order to accustom pupils to understand a written text already at an early age and use the acquired information to realise the tasks (thereat avoiding the shortcomings of oral instructions), written instructions should complement oral presentation in order to diversify teaching. The Estonian educational scientist J. Käis (Käis, 1992) suggested using written instructions already in the 1930s, because written instructions enable pupils to choose their work assignments, helping them to

discovering the correct tools, to better organise and perform their individual work; likewise, wellconstructed instructions help pupils to reach their objective faster. Hereby it is important to note that in addition to the traditional learning skills we now also have the skill to understand visual, televisual and electronic texts. In today's information society working with a text has become far more important as an educational objective than it used to be (Põhikooli riiklik õppekava, 2011).

In practical subjects working with a text could, in addition to the aforesaid, point out the following important aspects (Kuitunen, Meisalo, 1995):

- 1. developing thinking skills and oral communication;
- 2. developing pupil's independence, which results in developing their skill of choosing, responsibility, judgement or in other words: in order to achieve the best possible final result when working independently with an instruction, pupils should independently find the best and the most effective answers to the questions and solutions to their problems that arise during the course of work.

The skill of individually choosing the best solutions to problems with the help of a text is an important component in developing creativity (Suojanen, 1993; Alamäki, 1997; Batey, Furnham, 2006).

#### Materials and methods

In order to get an overview of how and whether pupils are able to independently interpret practical work assignments based on a written instruction, a pertinent experiment was carried out among the pupils of the 1st stage of studies, which aimed at getting answers to the following questions:

- a) do pupils face difficulties in understanding work assignment when individually working with a text;
- b) how do pupils relate the text and drawings to practical activities;
- c) to what extent does independent work favour unprompted approach to a task.

The tentative utilization of instructions was carried out in Craft lessons in Grades 2 (8-year-olds) and 4 (10-year-olds). The experiment comprised pupils in Tallinn schools. Putting together the instructions was based on the active syllabus and the craft textbooks for Grades 1 to 4 used at the schools. Two different instructions were used which differed in the degree of difficulty as well as in the use of materials, tools, and technology. Whereas reading (understanding the text) requires reflecting on the content of the text, associating the information with experiences obtained from other sources (Goodman, 1967), the tasks were selected on the basis of the following criteria: the required techniques should already be acquired and the pupils in both age groups should be able to complete the tasks. The total of 173 pupils in Grades 2 and 4 worked with the first instructions. For the pupils, who took part in the experiment using instructions in the work process it was a rather novel method in Craft lessons.

The first task included making a less complicated object, using simpler techniques and simpler materials. The task was to make a paper greeting card, where the main decorative technique was braiding. The relevant skills developed in the work process were measuring accuracy and the correctness of cutting. The compositional aspect (choice of colours, the pattern) was a task each pupil was to tackle individually.

The second task included making a doll-shaped pincushion, whereas important aspects included acquiring proficiency in cutting textile, observing different sizes of details – comparing, developing the sense of proportion. Making and designing the head for the pincushion required individual approach. From the creative point of view both of the tasks were free, promoted the development of pupils' skills to think, visualize, analyse and make decisions, developed their sense of space, the ability to use texts and technical drawings, and to relate these to practical activities.

The organisation of work in the lessons was as follows: first, the pupils read the instructions and after having read them, they had the possibility to ask the teacher questions about the aspects of the instructions, which they found unclear or complicated. After the teacher had addressed all the

problems, pupils started working independently. During the whole work process pupils were allowed to consult the finished models and to discuss with peers. Pupils were allowed to address their teacher with questions only if they could not find the answer in the instructions.

In order to analyse the results, pupils' work process was observed, the lessons were recorded in writing, and a feedback questionnaire was administered at the end of the experiment.

#### **Results and discussion**

**Results of the first instructions (paper greeting card).** In both of the age groups two consecutive lessons (i.e. 2 X 45 minutes) were planned for carrying out the work. There were no significant differences in using the given time frame in Grades 2 and 4. It could not be claimed that older children finished the work faster. The time needed for completing the task was very similar in case of both the slowest pupils (Grade 2 - 71 minutes; Grade 4 - 63 minutes) and the quickest pupils (Grade 2 - 26 minutes; Grade 4 - 28 minutes) in different age groups. Since pupils were allowed to work at their own pace, the variations were mainly due to individual differences and not due to differences in age. As on the average this particular task was completed within the first 45 minutes, such tasks (together with using instructions) can be offered as an additional task to quicker pupils to fill in the rest of their lesson with something meaningful and useful. Since pupils work independently using instructions, they will not disturb their peers and they can also peacefully focus on their task.

In different grades pupils had different questions regarding the process of work, but in both age groups the questions were bound to techniques; designing the card and other artistic issues were generally discussed between peers, who mostly asked for one another's opinion.

Although in Grade 2 the notions of centimetre and millimetre had already been covered, these were still rather new for a part of the children, there were a lot of questions concerned with measuring. Also in the older age group pupils' questions touched upon the issue of measuring, but these were rather from the point of view whether the given measures were supposed to be strictly followed or not. Generally it could be claimed that there were more questions about the first part of the instructions, when pupils were not used to focussing on the text yet; in the course of time they tended to read the instructions more thoroughly and also used and followed these more persistently.

Another problem observed in both age groups was the impractical use of materials. Pupils didn't understand they could make use of straight edges of the paper and use pieces of paper that had the right size for their work; therefore pupils complicated several measuring tasks and cutting out shapes and thus had to do more work. It would probably be wise to pay special attention to practical use of materials also in drawing up the instructions and no doubt teachers should intervene and give suggestions.

In both age groups there were children, who used the instructions completely independently and on their own, but in both age groups there were also pupils, who discussed the process of work with their peer, compared their works and also checked how the other peers were doing. In Grade 4 there were pupils who tended to instruct peers, who didn't understand the text. In both age groups there were pupils who needed teacher's assurance and constant approval; in Grade 4 the number of such pupils was higher.

Analysing the result of the observation many other interesting aspects emerged. Comparing the results of the tasks it was discovered that although the Grade 4 pupils had greater experiences and more advanced manual skills their works were not necessarily more interesting and unique, but definitely more correct. Older pupils had the skill and the ability to measure and decide on appropriate sizes, to cut paper and they were much more experienced in glueing, due to which the completed work was neater and more correct. However, the Grade 2 pupils were more creative and free in their designs. In brief it could be said that both the older and younger pupils completed their work correspondingly to their abilities, experiences, and fantasy and the overall impression of the works was positive.

**Results of the second instruction (doll-shaped pincushion).** As previously said the work on the second task was more complicated and processing the materials was more complex. To make a doll-shaped pincushion pupils were to cut a number of textile circles with different size, pin them on a

piece of wire attached to cardboard and finally design the head for the doll. Since pupils had to cut out a lot of textile circles and cutting textile is technologically more difficult that cutting paper, completing the task required a lot more time than the first task. In case of Grade 4 pupils the average time for completing the task was 83 minutes, the average of Grade 2 pupils was 81 minutes.

In both age groups pupils discovered convenient techniques in the work process: while at the beginning pupils cut out the circles of the same size one by one, then at some point pupils realised that textile can and may be cut also in multiple layers, which simplified and speeded up the work process. Compared to making the greeting cards, pupils had considerably less questions when making the pincushion. The pupils understood that the more carefully they work the better and the prettier the objects they are making will be and thus they worked diligently and carefully.

Carrying out the task pupils had a lot of power to decide how to plan the work and design the object. For example, they had to decide the order of the stages of work: they could either first draw all the circles on fabric and then cut these out or first cut out one size and then move on to drawing and cutting the other sizes. Pupils could also decide upon the design of the head and how to attach it to the pincushion. With this stage Grade 2 pupils showed more creativity than Grade 4 pupils. In brief it could be said that the finished works of Grade 4 pupils were again neater and corresponded to the instructions. Generally, the objects completed by Grade 2 pupils were not as correct, yet they were more creative: designing and finishing the objects Grade 2 pupils leaned more on their own imagination, they were more adventurous and free in completing the task. Limited fantasy was a major shortcoming in case of Grade 4 pupils.

Regarding the experiment, the proposition by T. Amabile (Amabile, 1989) that teachers have the power to slow down children's initiative, seems to be valid. Grade 4 pupils have already got used to teachers giving them detailed instructions and strictly follow the given requirements. This contributes to the lack of creativity in the works of Grade 4 pupils compared to their younger peers.

After the experiment a questionnaire was administered to the pupils, where they were to give their assessment to and comment on the work in Craft lessons. They were to compare a lesson, where the teacher instructed them orally with a lesson, where they had to work independently using written instructions. Pupils were asked to point out the aspects of using written instructions the liked the most and those that were the most troublesome. The results of the questionnaire will be presented below.

The question whether pupils liked the work process with written instructions received the affirmative answer from 76.3% of Grade 2 pupils and from 86.8% of Grade 4 pupils. The main advantages the pupils pointed out were the calmer environment in the classroom, more possibilities to think and to plan compared to a lesson guided by the teacher. Another important aspect was the possibility to work at one's own pace and check the steps they did not understand or had forgotten. As a positive feedback Grade 4 pupils pointed out that working with a text requires more individual thinking, which in turn develops them and using written instructions gives a better sense of self-control.

As a disadvantage, some Grade 2 pupils pointed out that although they understood written instructions better than teacher's explanations, they lacked self-confidence. Some Grade 4 pupils noted that they would have liked the teachers to show them individual techniques.

With the previous question two statements were provided as control questions:

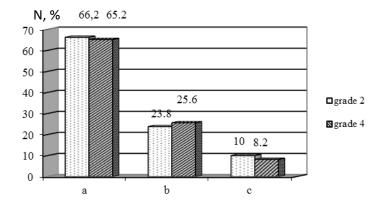
Working independently with written instructions is easier than following teachers oral instructions.

# Working independently with written instructions is more difficult than following teachers oral instructions.

66.2% of Grade 2 pupils held the opinion that it is easier to work independently and they pointed out the following arguments: they can read the instructions several times, the classroom environment is quieter and they can work in peace, the finished objects are different (otherwise all the works would be similar to the teacher's model), there is no constant flood of questions to the teacher and pupils can thus delve into the work. 23.8% of the younger pupils found such a working method more difficult, because they have to read the text many times and the teacher does not show them individual

techniques. 10% of the respondents noted that both of the methods have their advantages and disadvantages and did not prefer one method to the other.

65.2% of Grade 4 pupils preferred working with a written instruction to following teacher's oral instructions. The due argument was that pupils do not always understand the teacher, but the text in the instructions is illustrated by drawings that help them understand and the text can be read several times if something in unclear. 25.6% of the children found such a method difficult, because teacher did not give detailed explanation or show them the techniques. 8.2% of the respondents did not prefer one method to the other (Figure 1).



N% - number of respondents in percentages a - easier b - more difficult c - no preference



Pupils were asked to point out what was difficult in completing the tasks. Only problems related to specific procedures in the work process were pointed out; there were no difficulties related to working with written instructions, which is very positive in terms of understanding a text.

With the last question in the questionnaire we wanted to know whether children would like to work with written instructions also in the future.

81.4% of the Grade 2 pupils expressed their wish to do that, because they found the method funny and interesting, it gives more opportunities for independent thinking, the work can be finished faster and all-in-all it promotes self-awareness: pupils feel they are older and smarter, if teacher gives them more difficult and more complex tasks. Naturally there were also adverse opinions, but such pupils were greatly outnumbered (8.5% of the respondents). Pupils who did not wish to use written instructions in the future would have expected that the teacher gave detailed explanations on different stages of the work process.

79.4% of the Grade 4 pupils expressed their wish to use written institutions also in the future. In their opinion independent work was developing and easier. 14.7% of Grade 4 pupils thought that this methods is more time consuming and thus more difficult for them.

#### Conclusions

- Developing reading skills plays an important role in Craft lessons on the 1st stage of studies. As a result of such type of an individual work pupils develop the skill of working with a text and drawings and relating these with practical activities.
- If a written instruction contains notions and working methods pupils already know, they should not have difficulties with understanding the task.
- Written instructions promote the development of thinking, creativity, sense of space and imagination. It lays the foundation for the ability to analyse independently and also gives creative freedom.

• However, using written instructions should only be one possible method among others. Pupils differ in their knowledge, skills and experience, which renders it important that different methods be used. This statement is also asserted by the results of the questionnaire.

#### References

- 1. Alamäki A. (1997). *Käsityö- ja tehnoloogiakasvatuksen kehittämisen lähtökohtia varhaiskasvatuksessa.* (The basis of developing Craft and Technology Education in early childhood education). Rauma: Turun yliopisto Rauman opettajankoulutuslaitos. (In Finnish)
- 2. Amabile T. M. (1989). Growing up Creative. New York.
- 3. Batey M., Furnham, A. (2006). Creativity, intelligence and personality. A critical review of the scattered literature. Genetic, social and General Psychology Monographs. Pp. 355 429.
- 4. Goodman K. S. (1967). Reading: a psycholinguistic guessing game. *Journal of the Reading Specialist*, Vol. 4, p 126-135.
- 5. Kuitunen H., Meisalo V. (1995). *Luovan ongelmaratkaisun leviäminen koulun työtapana* (Promoting creative problems solving as a working method at school). Helsinki, Helsingin Yliopisto. (In Finnish)
- 6. Käis J. (1992). *Isetegevus ja individuaalne tööviis* (Initiative and individual working method). Tallinn, Koolibri. (In Estonian)
- 7. Lahdes E. (1997). *Peruskoulun uusi didaktiikka* (New didactics for primary schools). Helsinki, Otavan Kirjanpaino. (In Finnish)
- 8. Pandis M., Vernik-Tuubel E.M. (2004). *Funktsionaalne kirjaoskus* (Functional literacy), [online] [16.11.2011]. Available at <u>http://www.ut.ee/curriculum/orb.aw/class=file/action=preview/id=367441fk\_taust.pdf</u> (In Estonian)
- 9. *PISA 2009 results. OECD Programme for International Student Assessment (PISA).* [online] [18.11.2011]. Available at <a href="http://www.oecd.org/edu/pisa/2009">www.oecd.org/edu/pisa/2009</a>
- 10. *Põhikooli riiklik õppekava. Vastu võetud 06.01.2011.* (National curriculum for basic schools), [online] [10.10.2011] Available at https://www.riigiteataja.ee/akt/114012011001 (In Estonian)
- 11. Stedman L. B., Kaestle C. E. (1987) Literacy and reading performance in the United States from 1880 to the present. *Reading Research Quarterly* 22. pp.8-46.
- 12. Suojanen U. (1993). *Käsityökasvatuksen perusteet* (Criteria for Craft Education). Porvoo: WSOY. (In Finnish)
- Tire G., Puksand H., Henno I., Lepman T. (2009). *PISA 2009 Eesti tulemused* (PISA 2009 Estonian results). Tallinn. [online] [10.10.2011] Available at <a href="http://www.uuringud.ekk.edu.ee/fileadmin/user\_upload/dokuments/PISA\_2009\_Eesti.pdf">http://www.uuringud.ekk.edu.ee/fileadmin/user\_upload/dokuments/PISA\_2009\_Eesti.pdf</a> (In Estonian)

# INTERRELATIONS BETWEEN MULTICULTURAL ENVIRONMENT AND TEACHERS' READINESS IN THE IMPLEMENTATION OF CROSS-CULTURAL EDUCATION IN PRIMARY SCHOOL

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**Abstract:** The article describes theoretical discussions and the results of research work on a topical problem in ethnically heterogeneous classes in primary school and a teacher's readiness to conduct study process and organize out-of-class work in these classes. Theoretical discussion is based on the statements made by Bank, J.A. Brunner, J.S. Dirba, M.Holzkamp. The article reveals the theoretical model for the process of developing cross-cultural competence. Interacting with environment, having received a corresponding pedagogical guidance, a child acquires personal experience. It must be stressed that the value system of an individual is acquired already in childhood during socialization. The analysis of values and integration into the individual's value system indicates about the individual aspect, the presence of attitude process. As cross-cultural education is a dialogue, we have to conclude that it also refers to a teacher as a partner of the dialogue.

Keywords: cross-cultural competence, multicultural environment, primary school.

#### Introduction

Globalisation processes in the world have created the situation when more often it is necessary to speak about multicultural education, mutual understanding, multicultural environment in one class and school in general. Historically Latvia is a country where besides the basic nation 45% of the population are other nationalities, however, the issue about a successful inclusion of minorities into society is still topical. The ability to accept the other, to avoid the social stereotypes, compare and enrich one's experience, impressions by getting to know the other – these are preconditions which should be accepted by society, however, as experience shows the problem exists often without realizing it. A teacher, a pupil, the pupil's parents with different opinions, experience and nationality spend all day in the same school, the same class. The objective of this article is to look for answers to this problem and offer solutions. The problem under research was discussed in the 9th International Conference on Education in Greece. The research results were also discussed in scientific conferences in Narva and Sauli. The experience on formation of cultural competences was acquired in research work in University of Nebraska USA.

#### Materials and Methods

The analysis of theoretical literature, structured interviews of 93 primary school teachers in Latvia and 17 primary school teachers in Lincoln US, pedagogical observation, the interview embracing 89 pupils in Latvia and 57 pupils in Lincoln schools US were used for this article,

#### **Results and Discussion**

#### Why are we talking about cross-cultural issues, cross-cultural education?

If we want the young people to be tolerant towards the other, they need the experience in communication with the otherness.

Today diversity in democratic society is topical because certain ethnic, religious, language, sexual orientation and invalidity groups are structurally or culturally privileged or marginalized.

Marginalized groups put pressure on cultural or structural changes in order to provide their equal rights both in the specific country and internationally (Bank, 2004).

As we see from the interview results, on the one hand, the teachers point out that the only problems in the classroom are connected with the acquisition of the Latvian language skills for minority pupils, on the other hand, 51% of the teachers frankly admitted that they lack experience, understanding how to organize pedagogical process in the environment which can be called

Table 1

multicultural (Table 1).

Interview questions	Percentage	Percentage		
	52 % - 90 %	3 % - 49 %		
To express opinion on	85% of the interviewed	15 % of the teachers consider that there are		
the importance of	teachers revealed that	no problems at all because all children		
cross-cultural	classroom environment	quickly acquire the Latvian language an		
problems in society	really becomes multi-	thus can follow the study process.		
including school	cultural if there are even a			
	couple of ethnic minority			
	pupils and the teacher has			
	to take into account that.			
To express opinion on	96% of the teachers pointed	Only 4 % of the teachers think that		
behavioural problems	out that pupils' ethnic	behavioural problems in the classroom are		
related to cross-	peculiarities, cultural	often connected with cross-cultural issues		
cultural issues in	belongingness do not affect			
ethno-linguistic	pupils' action and			
heterogeneous classes	behaviour			
To express opinion on	51% of the teachers	49% of the interviewed teachers pointed out		
teachers' readiness to	admitted that they lack	that pedagogical process at school do not		
organize and conduct	experience, knowledge how	need to include activities which give the		
pedagogical process	to organize pedagogical	opportunity to get acquainted with cultural		
in class	process so that pupils could	elements of ethnic minorities. It must be		
	enrich mutually under the	done in the family and school is not		
	influence of different	responsible for that. 19% of the teachers		
	cultural elements.	emphasized that we must think how to		
		make classroom environment as a factor		
		facilitating the development of all pupils.		

When interviewing 17 primary school teachers in 4 Lincoln schools, I could conclude that experience, understanding about cross-cultural education, problems and solutions considerably differ from the teachers' opinions in Latvia. The results of narrative interview are summarized in the Table 2.

Table 2

Lincoln primary school teachers' opinions						
Interview questions	Teachers' opinions	Comments				
To express opinion on the importance of cross-cultural problems in society including school	All 17 teachers considered that in their schools and society there are no problems connected with cross-cultural	According to a state provided programme Mexican families learn the English language free of charge. Parents attend school				
To express opinion on teachers' readiness to organize and conduct pedagogical process in class	relations. All teachers emphasized that they acquired a specific knowledge at University and they have carried out pedagogical process at schools which helped them to understand cultural competence for a teacher.	twice a week to study English. Teacher candidates take a special exam where they demonstrate their understanding, knowledge and model various situations for the work with the pupils of different nationalities and social groups.				

In the picture – *Cross-cultural concept* – we can see theoretical concept formed as a result of research work for the development process of cross-cultural competence which comprises both teachers and pupils' interaction in pedagogical process (Fig. 1).

# Analysis of narrative interview 93 primary school teachers participated in the interview

Interacting with environment, having received a corresponding pedagogical guidance, a child acquires personal experience. It must be stressed that the value system of an individual is acquired already in childhood during socialization. The analysis of values and integration into the individual's value system indicates about the individual aspect, the presence of attitude process. As cross-cultural education is a dialogue, we have to conclude that it also refers to a teacher as a partner of the dialogue

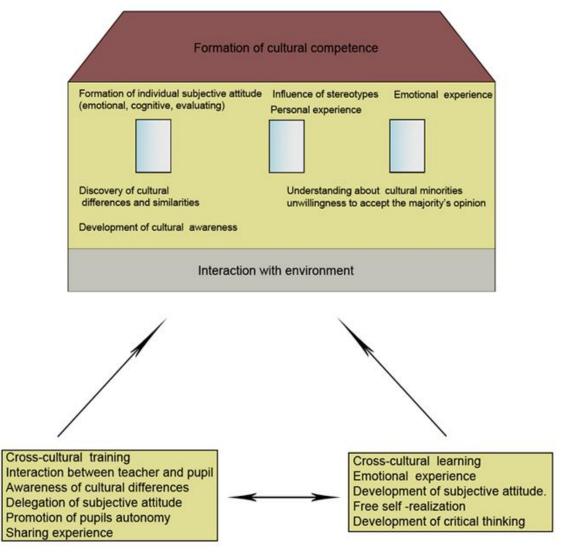


Figure 1. Concept of Cross-Cultural Education

Bruner Shreier in action definitions point out various aspects: intentionality, ambitiousness, awareness, determination, control, free choice. They form the conception of man as a subject of the action (a human being capable of acting, thinking, reflecting, communicating actively), who is able to select, plan and take decisions. Action is a form of active and objective interrelation between a human being and the surrounding environment based on needs (Bruner, 1996).

K. Holckamp from scientific aspect of the action subject considers that " action in its broader sense is man's life action, conscious and intentionally planned – directed towards a subjectively significant aim. It is a free in its choice and thus responsible for results and consequences. Action is based on will, it is consciously initiated and subjectively experienced as such. (Holzkamp, 1983)

M.Vidnere emphasizes that emotional experience is not only self-reflection and self-esteem, not only passive guess, but also a creative act affecting consciousness and can be as a generator of child's will and mental energy (Vidnere, 1999).

The knowledge acquired in study process (also about national peculiarities of different peoples) can be transformed into comprehension level only in case if the child experiences them as an

important fact to himself. According to I.Žogla by showing personal significance and sense of cognition, cognitive emotions and feelings are expressed in excitement, joy, inspiration, persistence and delight (Zogla, 2001).

A pupil's attitudes are expressed in values, principles and ideals. It is a quality of personality which is formed in the uniformity of life experience, acquisition of knowledge, emotional experience and will (Table 3).

Table 3

# Expression of attitudes of teachers and pupils in Latvian and Lincoln primary schools

Issue under	Teachers' opinion in	Teachers' opinion in	Pupils' opinion
discussion	Latvia	Lincoln	
What is the	Most part of the teachers	All teachers'	Conceptually pupils' opinion
attitude to other	considered that the	opinions and answers	did not differ. Pupils from
nationalities in	attitude to the pupils of	acknowledged that	both Latvia and US think that
the class	other nationalities is	teachers' task is not	there are no problems among
	positive.Some answers	only help the pupils	them.
	were very radical,	to fit in the class as	
	banning the pupils from	well as possible, but	
	using their native	give help also to	
	language at school even	parents	
	during breaks		
Should the	Most of the teachers in	Teachers' opinions	Pupils' answers proved that
pupils be	Latvia emphasized that	considerably varied.	they do not have such
introduced to the	school does not have to	During talks they	experience. The answers of 2
traditions and	think how to introduce	revealed that both the	school pupils expressed
cultural	cultural traditions of	academic staff and	delight about 'language''
elements of the	minority pupils to the	parents plan events	event. In these schools
minority pupils	other pupils. It must be	so that pupils could	minority pupils demonstrated
in the class	done by the family;	be able to take part in	performances prepared at
during	school does not have to	various activities and	home which comprised
pedagogical	be responsible for that.	get to know the	national traditions. Lincoln
process or out-	Only 11 teachers out of	differences of	pupils' answers can be
of-class	93 considered that it	cultural traditions.	characterized by the answer of
activities	should be thought how to		one pupil:
	include such activities		"We learn a lot about our
	into pedagogical process		classmates and about each
	which would provide		other. It is more interesting
	learning about cultural		when we can see and take
	traditions of minority		part.
	pupils.		

Analyzing the opinions expressed in interviews we can conclude that the teachers in Latvia have difficulties with attitude component, experience and professional experience to organize pedagogical process in multicultural class environment. At the same time it is the attitude which determines the ability of each individual to accept or not the others' opinion.

The most essential answers confirming the real problems for teachers:

- d) We have had gipsy children. We have come to conclusion that it is a totally different nation which we cannot understand completely. We are not able to work with them. We suffer and so do the children.
- e) In our classes there are children from mixed families where they speak Russian at home and the children speak Latvian very badly. At school these children are very quiet and shy.
- f) I do not know how to work. We feel that we have to look for a different approach to organization of events and work with parents but we lack experience and knowledge how to do it.

From the obtained results we must conclude that attitude, the component of attitudes viewed from the aspect of professional competences is the most essential determing the teacher's action. It can be explained that attitude as a potential of psychic reaction in connection with the defined process mainly manifested itself as an emotional component. Just the emotional experience is the uniting component in the system of attitudes of both teachers and pupils which further ensures a definite action.

Every culture has enough morally ethical basic values which are similar to the basic values of other cultures and it makes the mutual understanding possible (Mall, 1997; Dirba, 2006).

Interacting with environment, having received a corresponding pedagogical guidance, a child acquires personal experience. It must be stressed that the value system of an individual is acquired already in childhood during socialization. The analysis of values and integration into the individual's value system indicates about the individual aspect, the presence of attitude process. As crosscultural education is a dialogue, we have to conclude that it also refers to a teacher as a partner of the dialogue.

In individual education, which comprises knowledge, conclusions, imagination, judgment and critical thinking, <u>a mental capacity develops which enables a person to be aware of his culture and participate in it.</u> Culture determines the content of education: such factors as <u>criteria of values, skills, artistic design of environment, adjustment to nature and its adaptation by using it, everyday communication, social order (Joseph,2009).</u>

In multicultural education, as in every aspect of Education, the teacher is the critical variable. It is the teacher who makes the goals of accepting, respecting and appreciating oneself and others an honest and authentic dynamic in the classroom As a person, the teacher provides a model and the inspiration for children to adopt a pluralistic point of view. This role requires constant self – scrutiny because teachers, like everyone else in this society, have grown up with their own share of biases prejudices

It is very painful for anybody to admit that they have prejudiced feelins, and this is particularly true for teachers, who often are motivated by their idealistic desires to create a more fair and responsive world for children.

As it is described *in Picture 1*, the discovery of cultural differences and commonalities, understanding about the unwillingness of cultural minorities not always to accept the opinion of the majority are the factors that considerably vary in teachers' opinions on formation of cross-cultural competence.

Referring to the obtained results we must conclude that most of the teachers are not psychologically and professionally ready to change their stereotypical thinking and use the existing class multicultural environment for facilitating life skills of their pupils. Drawing conclusions on the results of the structured interview, we see that the problem is not in children but in adults, namely, in teachers and their parents.

#### Conclusions

Comparing higher educational study programmes for obtaining teacher's qualification in Latvia and similar study programmes in Nebraska University, US

we can conclude that students in Latvia have fewer opportunities to acquire the knowledge and practical skills for the work in multicultural environment at school.

Basically there is only one study course (2 credits) included in the study programme dealing with the issues on cross-cultural education. We should devote more attention to the formation of cross-cultural competence of future teachers already during the study process and acquiring the skill to reflect their theoretical knowledge in practical pedagogical work at school.

US the National Council for Accreditation of Teacher Education has also pressed for programs that require multicultural education. Association of Colleges for Teacher Education and the National Council for Accreditation of Teacher Education, worked together on standards for multicultural Education. Published in 1977, the organization required that educational institutions provide evidence that multicultural principles were infused into their teacher-education programs.

In the research out of 93 Latvian primary schools teachers only 17 emphasized that they lack knowledge how to work and organize pedagogical process so that pupils could enrich themselves by learning about the different and evaluating the wealth belonging to each nation as heritage which could be passed further through emotional experience, active pedagogical work. It means that we must create an opportunity for teachers to raise their competence for the work in multicultural environment.

A teacher's cross-cultural competence can be characterized as the ability to successfully work across ethnicities, races and cultures in a way that he acknowledges and respects the other. One achieves cultural competence by acquiring, translating, and integrating knowledge about the different, seeks to understand the communities they come from, and contemplates the ways of incorporating this information in their future teaching.

"Culture cannot be learned, you must grow into it: culture already exists in its values but values cannot be accepted only with mind – they must be felt and experienced. Culture begins with the first days of man's life – when mother is singing the first lullaby" (P.Jurevcics, 1936)

#### References

- 1. Banks J.A.(2004). *Multicultural Education: historical development, dimensions, and practice.* The handbook of research on multicultural Education(Second ed.),San Francisco: Jossey-Bass p.36-41.
- 2. Bruner J.S.(1996). The Culture of Education. New York, Norton, p. 37-41.
- 3. Dirba M. (2006). *Mijkultūru izglītības daudzveidība* (The Diversity of Cross-cultural Education). Rīga, RaKa, p. 45-51. (In Latvian)
- 4. Holzkamp K. (1983). Der Mench als Subjekt wissenshaflicher Methodik. Kritische Psychologie (Critical Psychology). [online] [28.12.2011]. Available at <a href="http://www.kritische-psychologie.de/texte/kh1983a.html">http://www.kritische-psychologie.de/texte/kh1983a.html</a> (In German)
- 5. Joseph M. (2009). *Developing Multicultural Teacher Education Curricula*. State University of New York Press p.13-46.
- 6. Jurevičs P. (1936). Nacionālās dzīves problēmas (The problems of national life). Rīga, Valters un Rapa, p. 5-13. (In Latvian)
- 7. Mall R. (1997). *Four Dimensions of Intercultural Psilosophy*. International Textbook Research Network Newsletter 6, 2. Jahrg. Vol. 19. Braunschweig, UNESCO, p. 34-56.
- 8. Petere A. (2003). *Integrated studies in the light of the humane paradigm*, Pedagogica 65, Vilnius, Lithuania, p. 49-54.
- 9. Vidnere M. (1999). *Pārdzīvojumu pieredzes psiholoģija* (Psychology of emotional experience), *Rīga*, RaKa, p. 6-15. (In Latvian)
- 10. Žogla I. (2001). *Didaktikas teorētiskie pamati* (Theoretical fundamentals of didactics). Rīga, RaKa, p. 89 -105. (In Latvian)

#### ANALYSIS OF UNEMPLOYED STRUCTURE IN LATVIA ACCORDING TO THEIR ACQUIRED EDUCATION

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**Abstract:** The article discusses a range of significant and topical problems connected to the unemployed problems related to education, the lack of diverse new methods for ensuring a more effective study process of the unemployed in Latvia. Such problems of the unemployed as social exclusion, lack of communication, which hamper the individual self-realization and making of contacts, are becoming increasingly topical within the society. The problem in the area of employment is related to the lack of balance between the labour market demand and supply. The aim of the research\_is to analyze the structure of the unemployed in Latvia according to their acquired level of education and to prove that during the crisis scientifically justified labour market research is needed to foresee the development of the labour market in future and determine efficient mechanisms for solving the problem of economic inactivity by means of fostering labour market competitiveness, adding new skills to the acquired ones, increasing the education level according to the changing work and life conditions. The research was carried out in the Jekabpils Branch of the State Employment Agency and the Institute of Education and Home Economics of the Latvia University of Agriculture, applying methods of theoretical analysis and evaluation.

Keywords: education, employment, motivation, unemployment, the unemployed.

#### Introduction

Work is one of the most essential human activities. Usually it is the main source of earning for living, as well as serves as grounds for creative thinking, self-realization and social contacts. The fulfilment of work-related tasks and the social environment ensures the possibility to develop oneself, ones own personality (Renge, 2000). Employment is one of the principal economic problems that elicit a wide social and political response. Thus also the level of economic activity is directly linked with employment and education – the higher the unemployment rate in a country or region, the more attention to that is paid.

The educational and financial policy initiatives implemented during the latest years have not been efficient enough and advised, and the present global financial crisis has made also Latvia lag several years behind, making the government search for new solutions within the areas of social policy, education and employment. Active employment policy is the principal tool for ensuring welfare, and active measures for fostering employment can help find the way out of the crisis. Now it is very important for each individual to continuously acquire new skills for the motivation to obtain higher education, as well as for promoting economic growth and productivity, focusing on the improving quality of education and training, including the development of innovative learning and teaching methods (Renge, 2002). Latvian state has available help from the European Globalisation Adjustment Fund (EGF), which is the part of European response to financial and economic crisis, and it's goal is to help European citizens, who has lost their jobs because of the current global financial and economic crisis, and support their efforts to find a job quickly. The Fund is specifically designed for those workers, who are dismissed because of world trade patterns change or the current financial and economic crisis (Eiropas Globalizācijas pielāgošanas fonds, 2011). Lithuania and other European Union countries has repeatedly received the support from The Fund EGF, but Latvia, where is one of the highest unemployment levels and where many people lost their jobs because of the global financial crisis, was not used the possibilities of the Fund EGF yet (Jančevska, 2011).

The employers have the possibility to choose and select the most appropriate and productive employers for a payment that is available and comparable with the productivity of employees. The less qualified employees are no more needed, thus making the composition of the unemployed to be characterised as less skilled, with lower level of education or being more or less problematic to employ (Pļaveniece, Skuškovnika, 2002). In such a situation, the socially less protected groups of population – the disabled, elderly, youth, women after maternity leave, as well as less educated people – become unemployed, thus annulling the lately achieved improvements within the labour market (Briges komunikē par ciešāku Eiropas sadarbību..., 2011).

The reduction of workforce and aging of the society in Latvia encourages to pay special attention to the preparation of the youth for the labour market requirements (the national unemployment rate in youth is a risk for the future economic growth) and training of elderly people in order to promote their competitiveness in the labour market as long as possible (National Reform Programme of Latvia for the Implementation of the "Europe 2020" Strategy, 2011). In the result of narrowing of different sectors the number of the unemployed increases and even highly qualified and skilled specialists become unemployed.

Reasons for the ongoing changes in the society have influenced the education and training systems. In unemployment and technological revolution conditions, the study process shall not be limited to obtaining primary education; instead it shall ensure a stable comprehensive knowledge base for renewing technical and professional skills of employees. Everyone shall follow the new topicalities related to the educational development in Europe, should visualize the prospective and search for ways to acquire higher education (National Reform Programme of Latvia for the Implementation of the "Europe 2020" Strategy, 2011). Each family, each school learner and each person within the labour market is concerned about the destructive effect of unemployment on personality and society in general (Omarova, 1994). The best opportunity for education to continue to perform its essential development function is striving to provide a convincing response that could dispel this concern.

Results of a research in the State Employment Agency (SEA) about people who have become unemployed due to various reasons revealed that every year the knowledge level of the unemployed becomes lower, that there is a lack of the necessary background knowledge, and that a large part of the unemployed are not able to and do not wish to learn (See Table 2). Their presence in the SEA further education learning groups they often justify by the opportunities to receive grants or influences from their family wishes. The underlying reasons of this problem are very deep.

To let SEA specialists successfully determine whether people wish to do something to improve their standard of living and welfare according to the market requirements, whether they are motivated or they need help from specialists, motivation trends should be distinguished. Usually the word 'motivation' is perceived as energy, delight, activity. Motivation of individuals can be recognized by the stability, intensity and orientation (Felzers, 2006).

Drawing up the prospective tasks for the development of our society and assessing them, increasingly more statements about the development prospective of a young specialist were expressed, such as moral autonomy, own viewpoints, activity, need for development. It means that the society increasingly demands independent, creative personalities able to determine their lives regardless of any 'driving forces', able to choose their life goals and ways of achieving them, thus ensuring personal development and a positive effect on the development of the society (Felzers, 2006).

To ensure personality development, a goal is needed, but achievement of any goal involves certain activity. There should be a need – more or less conscious – that serves as grounds for orientation towards self-development (Stabiņš, Pupiņš, 2008). Within the everyday work with the unemployed in SEA, while observing their attitudes towards the specific life situations, education, the following questions arise: how to motivate them to acquire a new profession or to train skills within an existing profession, increase the importance of learning, justify the importance of learning, what methods to use, how to help choose the most appropriate education institution.

Facing the problems and difficulties within the study process, the unemployed often lose interest in studies and consider them to be of no use, thinking of excuses related to health problems, age or family conditions and in the worst case deserting from the study process without provision of any explanations.

The following goals were defined to improve the education policy of the Republic of Latvia:

- to improve access to education;
- to promote access to lifelong learning;
- to eliminate the possibilities of exclusion form the education process;

• to balance the labour market demand and supply by determining the acquisition of the topical professions.

#### Materials and Methods

Analysis of unemployment problems and employment conditions, as well as solution of these issues is the everyday work of the authors already for several years both in the Jēkabpils branch of the State Employment Agency and at the Institute of Education and Home Economics of the Latvia University of Agriculture.

The aim of the article is to analyze the structure of the unemployed in Latvia according to their acquired level of education and to prove that during the present crisis scientifically justified labour market research is needed to foresee the development of the labour market in future and determine efficient mechanisms for solving the problem of economic inactivity by means of fostering labour market competitiveness, adding new skills to the acquired ones, increasing the education level according to the changing work and life conditions (Geske, Grīnfelds, 2006).

The problem of the research are defined as follows:

- insufficient learning motivation of the unemployed;
- lack of diverse new methods for efficient learning process of the unemployed;
- lack of balance in the labour market demand and supply for determining the acquisition of the necessary professions in long-term.

The theoretical methods - the studies of scientific literature and different types of documents, analysis and evaluation as well as reflection of personal experience are used in the research.

In the previous years, e. g., in 2006, 2007, there were different kinds of Latvian labour market studies carried out, e. g., 'Study for Evaluating Correspondence of the Qualitative Composition of the Long-term Unemployed to the Labour Market Demand' and 'Reasons and Consequences of Unemployment and Social Exclusion'. The national level studies were carried out by the Marketing and Public Opinion Research Centre and the Sociology Research Institute of the University of Latvia ("Socioloģisko pētījumu institūts Ltd."). The studies analysed the qualitative composition of the long-term unemployed, evaluating their education, motivation and described the obstacles for involvement in the labour market and active measures adopted by the State Employment Agency.

#### **Results and Discussion**

The unemployment rate in a particular country, region in a certain period of time is one of the most significant indicators as regards the degree of economic activity. Prerequisites for the determination of the state's economy were gradually formed. The Great Depression came to an essential need to reassess the role of the state in economy during 1928-1933. Consequently, it was John Maynard Keynes (1883 - 1946) who developed the concept of economic regulation, laying the foundation for the entire macro-economic theory. This theory was a coup, because the economy has been studied not only from a narrow business lines, but the country's overall interests. John Maynard Keynes in his popular book" The General Theory of Employment, Interest and Money" offers its own interpretation of mass unemployment and gives recommendations for the implementation of national policies to fight unemployment. The work was written during the Great Depression, when unemployment on a large scale covering the world's leading powers (Кейнс, 2007). Decreasing of the unemployment is the competence of each state, but there are common terms put forth for the employment rate in the European Union (EU), Therefore this socially economical problem is especially topical in the period of time until 2011, when the employment rate of 70 % should be achieved in all EU member states. At the present moment, the employment rate in Latvia is only 51.7 % (Latvijas ilgtspējīgas attīstības stratēģija līdz 2030.gadam, 2008). Due to various reasons the real unemployment can be far greater than the one proposed by the official statistical data.

With the growth of the importance of knowledge in the economy, demand for accordingly prepared and qualified specialists grows increasingly as well. Education programmes no more guarantee knowledge and skills for the whole life. If necessary, everyone should be active and ready to change profession, fully apply personal creative potential and develop it throughout life (Maslo, 2003).

The role of non-formal education grows in increasing competitiveness and the expanding possibilities for integrating into the labour market.

The employment rate registered by the Latvian State Employment Agency (SEA) in the first quarter of 2011 (14.4 %) was higher than in Estonia (13.8 %), but lower than in Lithuania (16.3 %) (Table 1).

Table 1

Inspection year	Registered unemployment rate (%), SEA	Level of job seekers (%), data of the Central Statistical Bureau
2009	16.0	20.1
2010	14.3	17.2
2011	14.4	16.5

<b>Registered rate of unem</b>	nlovment and level	of ion seekers in	Latvia 2009 <u>–</u> 2011
Registered rate of unem	pioyment and it ver	of job sectors in	

Source: NVA dati (2009-2011)

In the breakdown according to levels of education, the highest number of the registered unemployed is within the level of professional education, i. e., 48430 unemployed people -35.2 % of the total number of the registered unemployed (Table 2).

Table 2

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Breakdown of the unemploye	d according to levels of e	education in Latvia 2009 – 2011

	the	Brea	Breakdown according to education					9	% of tot	al	
Year	Total number of th unemployed registered	Higher	Professional	Primary	Secondary	Lower than primary	Higher	Professional	Primary	Secondary	Lower than primary
2009	179235	25986	65954	31768	49438	3717	14.5	36.8	17.7	27.6	2.1
2010	162463	19927	58902	32514	45661	4231	12.3	36.2	20.0	28.1	2.6
2011	137638	16844	48430	26712	37488	3702	12.2	35.2	19.4	27.2	2.7

Source: NVA dati (2009-2011)

It should be noted, that first of all less educated and less qualified people will be the ones to loose their jobs. Only high level of proficiency demanded in the labour market can save a specialist. A genuine professional will never be unemployed. Everything is up to the individual – if he/she wishes to save their work, he/she shall learn, obtain qualification to be competitive in the labour market (Plaveniece, Škuškovnika, 2002). At the moment, the number of the unemployed with the level of higher education has increased as well. In 2011, it was 16844 people or 12.2 % of the total number of the unemployed with the level of higher education. Especially women have become unemployed. The number of unemployed women is 12161 or 71.5 of the total number of the unemployed with the level of higher education. There are 4850 unemployed men with the level of higher education or 28.5 % of the total number of the unemployed with the level of higher education (NVA dati, 2011).

Table 3 clearly summarizes the number of the registered unemployed with the level of higher education representing a breakdown according to professions.

The largest number of the unemployed is registered in the engineering profession -15.3 %, then economists follow with 15.1 % and teachers account for 11.3 % of the total number of the unemployed (Table 3).

Table 3

# The number of the registered unemployed with the level of higher education, representing a breakdown according to professions in July, 2011

Education profession	Number of the unemployed	% of total
Engineering (building, electrical, mechanical, electronics, etc.)	2602	15.3
Economist	2568	15.1
<b>Teacher</b> (general secondary education professional education,	1920	11.3
primary, pre-school, etc.)		
<b>Director/manager</b> (enterprise, unit, department, etc.)	1284	7.5
Lawer	886	5.2
Specialist (public relations, personnel, logistics, environment	739	4.3
protection, design, bank)		
Source: $NVA$ dati (2011)		

Source: NVA dati (2011)

To help the unemployed willing to find a job, SEA offers different learning programmes for professional qualification:

- professional training, requalification or qualification;
- training with the employer;
- non-formal education;
- measures for raising competitiveness;
- training and practice of the SEA agent assistants;
- lifelong learning events for the employed;
- career guidance.

Education is one of the preconditions for success within the labour market. The largest number of the unemployed is formed by people with professional education, general secondary education and primary or unfinished primary education. The number of the unemployed with higher education, in turn, already for several years fluctuates around the level of 12 % of the total number of the unemployed (Table 2). It testifies to the fact that people with higher education are better able to orient in the labour market and their level of mobility is higher.

Discussing the dynamics and tendencies of unemployment of the latest 3 years (Table 1), it can be concluded that there are the following principal problems in the Latvian workforce market:

- Lack of quantitative correspondence in supply and demand. This involves the problem that the number of the unemployed registered with SEA drastically differs from the number of vacancies. In Riga, this difference is around 21:1 (the unemployed: vacancies), but in rural areas the situation is even more serious, for example in Rezekne Region – 86:1, Balvi Region – 178:1 (NVA dati, 2009-2011). In these rural regions, no further development, economic activity or demand for workforce is foreseeable.

- Lack of qualitative correspondence in supply and demand. The workforce in the labour market is of comparatively low level of qualification, but there is a demand for highly qualified people. All workplaces demand young, educated people with knowledge of foreign languages, computer literate, able to fork unlimited hours and with practical work experience (Operational Programme "Human Resources and Employment", 2011).
- Lack of territorial correspondence in supply and demand. In various places of Latvia, the demand for certain professions is different. For workforce to freely move to another region, the following preconditions shall be met: available apartments for accommodation, vacancies for family members, sufficient flow of information on a national level. The real situation shows that people are not keen on suddenly changing their place of living for work, instead they better prefer to expect for vacancies near their places of living.

To improve the situation and ensuring contemporary, qualitative education that meets the national and global labour market requirements, as well as economic and social development needs of regions especially highlighting the following:

- professional education allows individuals at the age of working capacity to acquire knowledge, skills and qualification, preparing a competitive workforce for the sectors of national economy;
- formal, non-formal and informal education compliment each other, enriching the learning culture of the society and thus indirectly promoting motivation to plan career in a timely manner;
- lifelong learning provides the possibility for individuals to continue education developing competences and staying in the labour market, increasing capability, ability to adapt and contribution to the development of national economy;
- human general skills serve as grounds for further education and qualification and thus are an essential component in preparing of educated and highly skilled workforce, professional orientation and career education help find motivation to develop own career paths and personality according to labour market requirements;
- why people have to learn losing their job, what new skills is needed in today's circumstances?

It is necessary to develop further measures and tools to foresee in future expected professional skills deficit at national, regional and branch level:

- to promote employment opportunities and economic growth, and respond to broader social objectives, particularly promoting social inclusion;
- purposeful career opportunities should be provided for both youth and adults, and be equally focus on women and men also on people with high potential and on those who are at risk of exclusion from the labour for different reasons;
- to increase public awareness of the opportunities offered by The National Employment Agency;
- The Latvian state has to show more support for the unemployed who has lost their jobs because of the global financial crisis.

Only target oriented activity in Latvia by means of developing the knowledge society and developing an education system correspondent to this target can ensure development and growth of the state. Opposite to other countries which can choose from various ways of development, our country has no alternatives, and further hesitation can lead to irreversible consequences.

The aforementioned opportunities and consistencies are highlighted in the long-term conceptual document approved by the Parliament (*Saeima*) of the Republic of Latvia 'A Growth Model for Latvia: People First' (Latvijas izaugsmes modelis: Cilvēks pirmajā vietā, 2005), National Lisbon Programme (Nacionālā Lisabonas programma, 2005) and National Development Plan 2007 – 2013 (Latvian National Development Plan 2007- 2013, 2006). The Latvian education system has improved and become a part of the European education area.

Solutions for fostering employment are an important step forward to a more coordinated and improved action in the areas of education and employment, as at the moment it is impossible to prevent the unemployment caused by the crisis (Padomes un komisijas 2010.gada kopīgais progresa ziņojums par darba programmas "Izglītība un apmācība 2010" īstenošanu, 2010). However, in case of active involvement of the government it is possible to minimize the liquidation of workplaces and help thousands of people find new and better jobs. Therefore further research is necessary to help the society, each its member understand complicated, unpredictable situations in order to be able to help foresee the employment potential of each member of the society. According to the estimates of demography specialists, in 2030, about 57 % of the Latvian population will be over the age of economic activity and therefore dependent on the others. To compare – today only 45 % are over this age (Latvijas ilgtspējīgas attīstības stratēģija līdz 2030.gadam, 2008). It means that Latvia has to think of how to increase the proportion of economically active population by means of developing and improving lifelong learning programmes and making the period of economic activity as long as possible for every individual (Plaude, 2004).

The problem involves the insufficient motivation of the economically inactive population to improve their skills, the need to develop the organization of further education, the need to improve

cooperation between the employer and education institution, what the authors plan to solve in their further scientific research.

#### Conclusions

- In the breakdown according to levels of education, the highest number of the registered unemployed is with the level of professional education, i. e., 35.2 % of the total number of the registered unemployed. The unemployed with the level of higher education account for 12.2 % of the total number of the unemployed, but women as a social group account for 71 % of the total number of the unemployed with the level of higher education.
- Only high level of proficiency demanded in the labour market can save a specialist. A genuine professional will never be unemployed.
- The largest number of the unemployed with the level of higher education representing a breakdown according to professions is registered in the engineering profession 15.3 %, then economists follow with 15.1 % and teachers account for 11.3 % of the total number of the unemployed.
- To help the unemployed willing to find a job, SEA offers different learning programmes for professional qualification: professional training, requalification or qualification; training with the employer; non-formal education; measures for raising competitiveness; training and practice of the SEA agent assistants; lifelong learning events for the employed; career guidance.
- Discussing the dynamics and tendencies of unemployment of the latest 3 years, it can be concluded that the principal problems in the Latvian workforce market are the following: the lack of quantitative and qualitative correspondence, as well as of territorial correspondence in supply and demand.
- It means that the responsible authorities- ministries and National Employment Agencies and etc. of Latvia has to think of how to increase the proportion of economically active population by means of developing and improving lifelong learning programmes and making the period of economic activity as long as possible for every individual. This can be achieved by developing professional orientation and career education, what helps one's to find motivation to develop own career paths and personality according to labour market requirements as well as increasing public awareness of the opportunities offered by The National Employment Agency.
- However, in case of active involvement of the government now it is possible to minimize the liquidation of workplaces and help thousands of people find new and better jobs.
- Therefore further research is necessary to help the society, each its member understand complicated, unpredictable situations in order to be able to help foresee the employment potential of each member of the society.

#### References

- Briges komunikē par ciešāku Eiropas sadarbību profesionālās izglītības un apmācības jomā laikamposmam no 2011.gada līdz 2020.gadam. (Bruges Communiqué on Enhanced European Cooperation in Vocational Education and Training for Time Period from 2011 to 2020). Eiropas profesionālas izglītības un apmācības ministru, Eiropas sociālo partneru un Eiropas Komisijas komunikē. 07.12.2010, Brige, [online] [28.11.2011]. Available at http://ec.europa.eu/education/lifelong-learning-policy/doc/vocational/bruges\_lv.pdf (In Latvian)
- Eiropas Globalizācijas pielāgošanas fonds (EGF). (2011). (The European Globalisation Adjustment Fund), [online] [28.11.2011]. Available at <u>http://ec.europa.eu/social/main.jsp?catId=326&langId=lv</u> (In Latvian)
- 3. Geske A., Grīnfelds A. (2006). Izglītības pētniecība. (Educational Research), LU Akadēmiskais apgāds, Rīga, Latvija, 261 p. (In Latvian)
- Jančevska K. Latvija neizmanto ES Globalizācijas fondu (2011). (Latvia do not use EU Globalisation Fund), [online] [28.11.2011]. Available at <a href="http://www.euranet.eu/lav/programme/Latvian/Latvija-neizmanto-ES-Globalizacijas-fondu">http://www.euranet.eu/lav/programme/Latvian/Latvija-neizmanto-ES-Globalizacijas-fondu</a> (In Latvian)

- Felzers G. (2006). Motivēšanas veidi. (Types of Motivation), Zvaigzne ABC, Rīga, Latvija, 136 p. (In Latvian)
- Latvian National Development Plan 2007- 2013 (2006). Ministry of Regional Development and Local Government of the Republic of Latvia, Jelgavas tipogrāfija, Jelgava, Latvia, [online] [28.11.2011]. Available at
  - http://www.raplm.gov.lv/uploads/filedir/National\_development\_plan\_2007-2013\_eng.pdf
- Latvijas ilgtspējīgas attīstības stratēģija līdz 2030.gadam (2008). (The Strategy of Latvian Sustainable Development by 2030), SIA Analītisko pētījumu un stratēģiju laboratorija. (Laboratory of Analytic Research and Strategies), 2008.11. [online] [28.11.2011]. Available at <u>http://www.nap.lv/upload/lias\_1redakcija\_pilnv\_final.pdf</u> (In Latvian)
- Latvijas izaugsmes modelis: Cilvēks pirmajā vietā (2005). (Latvian Development model: People First), Vēstnesis Nr.180. 2005.11.10. [online] [28.11.2011]. Available at <u>http://www.futureofeurope.europarl.europa.eu/future/webdav/site/myjahiasite/shared/import/Hom</u> <u>e/LATVIA/chambre1/theme2/GlobalisationSaeima\_LV.PDF</u> (In Latvian)
- 9. Maslo E. (2003). Mācīšanās spēju pilnveide. (Improvement of Learning Skills), RAKA, Rīga, Latvija, 192 p. (In Latvian)
- 10. Nacionālā Lisabonas programma (2005). (The National Lisbon Programme), MK rīkojums nr. 684. no 19.10.2005. [online] [28.11.2011]. Available at http://www.em.gov.lv/em/images/modules/items/item\_file\_14488\_3.pdf (In Latvian)
- 11. National Reform Programme of Latvia for the Implementation of the "Europe 2020" Strategy (2011), Riga. [online] [28.11.2011]. Available at <a href="http://ec.europa.eu/europe2020/pdf/nat\_ref\_prog\_2011\_ly\_en.pdf">http://ec.europa.eu/europe2020/pdf/nat\_ref\_prog\_2011\_ly\_en.pdf</a>
- 12. NVA dati (2009 2011). (The Data from The National Employment Agency), [online] [28.11.2011]. Available at <u>http://www.nva.gov.lv/index.php?cid=6</u> (In Latvian)
- Operational Programme "Human Resources and Employment" (2011). Rīga, Ministry of Finance, Republic of Latvia. [online] [28.11.2011]. Available at <u>http://www.esfondi.lv/upload/04-kohezijas\_politikas\_nakotne/dp\_aktivitates/1dp/FMProgr\_1OP\_30092011\_ENG.pdf</u>
- 14. Omarova S. (1994). Cilvēks runā ar cilvēku. (Man Talking to People), SIA "Kamene", Rīga, Latvija, 99 p. (In Latvian)
- 15. Padomes un komisijas 2010.gada kopīgais progresa ziņojums par darba programmas "Izglītība un apmācība 2010" īstenošanu (2010). (Council and Commission Joint Progress Report 2010 on the Work Programme "Education and Training 2010"), Eiropas Savienības oficiālais vēstnesis (European Union Official Messenger) 2010/C 117/01. IV Paziņojumi, 06.05.2010. [online] [28.11.2011]. Available at <u>http://eur-</u>
- lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:117:0001:0007:LV:PDF (In Latvian)
- Plaude I. (2004). Kooperatīvās mācīšanās koncepcijas. (Concepts of Cooperative Learning), Krājums Kooperatīvā mācīšanās, RAKA, Rīga, Latvija. (In Latvian)
- 17. Plaveniece M., Škuškovnika D. (2002). Sociālā psiholoģija pedagogiem. (Social Psychology for Teachers), RAKA, Rīga, Latvija, 200 p. (In Latvian)
- Reņģe V. (2000). Personības psiholoģija. (Psychology of Personality), Zvaigzne ABC, Rīga, Latvija, 126 p. (In Latvian)
- Reņģe V. (2002). Sociālā psiholoģija. (Social Psychology), Zvaigzne ABC, Rīga, Latvija, 180 p. (In Latvian)
- Stabiņš J., Pupiņš M. (2008). Darba meklēšanas un uzsākšanas noslēpumu atslēga. (The Key of Job Search and Start Secrets), Metodiskais Līdzeklis, Biedrība Latvijas Pedagogu Federācija, Rīga, Latvija, 248 p. (In Latvian)
- 21. Кейнс Дж.М. (2007). Общая теория занятости, процента и денег. (General Theory of Employment, Interest and Money), Эксмо, Москва, Россия. (In Russian)

# NEW CURRICULUM, NEW DIRECTIONS? USING SOCIO-CULTURAL PERSPECTIVE TO DEVELOP HOME ECONOMICS EDUCATION IN ESTONIA

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**Abstract:** Will the new curriculum set also new directions in classroom activities? The innovations in the Estonian National Curriculum for the comprehensive school will be implemented by the end of 2014. At this stage it is necessary to analyse what kind of developmental needs can be found in different school subjects. In order for home economics (HE) education to fulfil contemporary societal and curricular needs, it is important to focus on the content as well as the teaching and learning methods used in classrooms. Our first aim is to introduce the main changes in the curriculum, as reflected in HE education. Our second aim is to analyse the nature of HE through socio-cultural lenses. The socio-cultural learning emphasizes collaboration, both in the social encounters between the teacher and the learner as well as between different learners. This kind of collaboration and the intelligent use of physical and psychological tools enable the students to reach their own zone of proximal development. Experimenting and reflecting on the learning outcomes in relation to real life challenges will further improve the quality of learning. In conclusion, the directions for the development of home economics in the Estonian context will be outlined.

Keywords: home economics, socio-cultural approach, curriculum.

#### Introduction and background

In this article we give an overview of the main changes made in the curriculum. Our interest is focused on the home economics education and on the learning approach used as the basis when developing the new curriculum. First, we present the nature of home economics in the new curriculum and highlight the main changes made in the context of this subject. Second, we introduce the main aspects of the socio-cultural learning and show the comparison between the socio-cultural learning approach described in the national curriculum. Third, we use the Vygotskian framework to give an insight into the socio-cultural home economics education. In conclusion, the developmental needs in the Estonian home economics education are outlined.

The Estonian National Curriculum for Comprehensive School has been finalized after a thorough national discussion on the future directions of the Estonian school system. The curriculum will be implemented in the study year 2013/2014. Now the developmental needs in different school subjects need to be analysed. At this stage, teachers need to reassess their current workplans and teaching methods. In order for the home economics education to fulfil contemporary societal and curricular needs, it is necessary to develop the content as well as the teaching and learning methods used in classrooms. There are also developmental challenges related to the in-service teacher training as well as to the Estonian home economics teacher education.

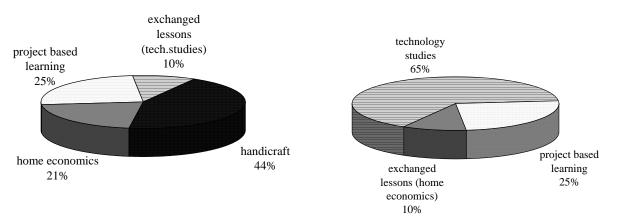
The overall structure of the National Curriculum has gone through considerable changes. Different subjects have been divided into subject fields in order to increase the integration between subjects with similar content. According to the new curriculum (2010) home economics belongs to the subject field Technology which is compulsory to all students in grades 1-9. There are three subjects under the subject field: *crafts* in grades 1 - 3 and *technology studies* (TS) or *handicraft and home economics* (HHE), starting from the 4<sup>th</sup> grade. In crafts lessons students get the basic knowledge in technology studies, handicraft and home economics so that they can find their personal interests and strengths. The HHE as well as TS are taught two lessons per week, with an exception in the 4<sup>th</sup> and 9<sup>th</sup> grade (one lesson per week for a year or two lessons per week for half a year).

From the 4<sup>th</sup> grade students are expected to choose their main subject (TS or HHE) till the end of the comprehensive school. Choices are expected to be made according to students' interests. In reality, due to historical influences those choices are generally based on gender. Therefore, girls usually get knowledge and skills in handicraft (mainly textile works) and home economics while boys work with wood and metal.

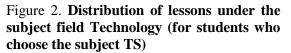
In addition to innovating the overall structure of the curriculum, also the content of lessons has been changed. The subject handicraft and home economics consists of four obligatory parts: handicraft, home economics, technology studies and project-based learning. Although students have chosen their main field of interest, they also get some knowledge in technology studies. Those lessons are organized once every year through study group exchange and they constitute 10 percent of the total number of the HHE lessons. The exchange of study groups was offered as an option also in the previous curriculum but it has now become a compulsory part of studies.

Also, project-based learning, as an obligatory part of teaching, has been added to curriculum as a major change (it must cover 25 percent of the HHE lessons). The content and the aims of projects are set by teachers in collaboration with students. Projects can be either in handicraft, in home economics or, if possible, can also combine these subjects (in addition, technology studies can be integrated if teachers find it possible to organize).

The amount of home economics lessons was set as a recommendation in the previous curriculum (2002). However, since teaching handicraft has long traditions in Estonia and home economics seemed to be a secondary subject, cooking lessons used to be alternative activities for manual handicraft lessons, having mainly the practical purpose – developing culinary skills (Lind *et. al.*, 2009; Paas, 2007). In order to reinforce home economics, the new curriculum sets the minimum amount of home economics lessons during a study year. In detail, the HHE lessons are divided as seen in Figure 1 in comparison with Figure 2 that shows the distribution of lessons for students who have chosen technology studies as their main field of interest.



# Figure 1. Distribution of lessons under the subject field Technology (for students who choose the subject HHE)



Although home economics, compared with handicraft, forms still a minor part of the HHE lessons, the new curriculum has set the mandatory amount of home economics lessons. Depending on the teacher and the students' interests, the total amount of home economics can increase through project-based learning, making it possible to divide handicraft and home economics lessons equally, 45 percent of each.

In the new curriculum, the content of home economics is wider than in the previous curriculum and the everyday practices at schools. According to the curriculum (2010), home economics is a subject where a student should:

"[...] acquire knowledge and skills for coping with everyday life. In addition to practical cooking, the basics of healthy eating and balanced menu are learned. Management skills are developed in the learning process; an environmentally friendly consumer, who knows one's rights and responsibilities, is valued; a person's consumer behaviour is analysed; and the connections and contradictions between personal health awareness and actual behaviour are explored. Students learn to do household chores and to recognize the need to involve all family members in household activities..."

Compared with the concept of the subject in the previous curriculum, wider topics have been pointed out in the home economics education. As an example the topic Nutrition has been widened into Basics of healthy eating; Hygiene into Organization of work and hygiene; Etiquette into Table manners; and Management into Consumer education. Other topics, Food preparation and Home maintenance, has remained the same. Changes in the context of each topic can be also seen, some of the topics are widened (like washing clothes with machine and manually, ironing, and taking care of footwear are added under the topic Home maintenance; or consumer information, and shorting waste under the topic Consumer education) while others are more concrete in new curriculum (uncooked desserts instead of not boiled desserts under the topic Food preparation; or Basics of healthy eating instead of basics of nutrition under the topic Basics of healthy eating).

The new approach shows home economics as a complex subject that provides knowledge and skills so that students become able to share responsibility and take care of various activities in their homes. Thereby, the home economics education meets societal expectations. In Estonia, home economics is seen as a focal point in the acquisition of knowledge and skills needed for everyday life (Lind *et. al.* 2005).

# Materials and Methods

We have analysed two Estonian national curricula (curriculum 2002 and 2010) in this paper. The New National Curriculum for Comprehensive School has been approved in 2010 and will be fully implemented by 2014 (starting from the autumn of 2011 in grades 1, 4, 7; from the autumn of 2012 in grades 2, 5, 8; and from the autumn of 2013 in grades 3, 6, 9). The new curriculum has been compared with the National Curriculum for Elementary School and Gymnasium (approved in 2002), which is partly in force until the total enactment of the new curriculum in 2014. The approach we have used for the analysis is qualitative content analysis, especially focused on the analysis of the meanings embedded in the national curricula (see e.g. Bryman, 1988; Taylor & Bogdan, 1984). Our analysis has been theory-based, since our intention is to explore the socio-cultural roots of the curricular development. Therefore, the curricula have been analysed in the socio-cultural perspective of learning, highlighting the main changes that have been made in the home economics education.

The socio-cultural approach has proved to be useful in studying home economics, both at school and in real-life situations (Tuomi-Gröhn & Palojoki, 2000). It provides useful theoretical and methodological tools for studying everyday choices and activities (Palojoki & Tuomi-Gröhn, 2002; Palojoki, 2003). Socio-cultural approach has been used in several researches to study different aspects of home economics (eg. Janhonen-Abruquah, 2010; Venäläinen, 2010; Malin, 2011).

# **Results and discussion**

The general part of the new curriculum introduces the learning approach that is expected to be used in all subjects, including handicraft and home economics studies. Thereby, the student is expected to be an active participant in the learning process who participates in setting one's own learning objectives. According to the learning approach in the national curriculum, learning is based on learners' experience; new knowledge is constructed on prior knowledge. Learning is a social process, taking place in physical, mental and social interaction, therefore, working collaboratively in the classroom is recommended. The learning environment is wide, including besides the school also the student's home and the space around it in which one operates every day. Thus, the new curriculum stresses the need to encourage socialisation and collaborative tasks which reflect the socio-cultural perspective of learning (see e.g. John-Steiner & Mahn, 1996; Wertsch, 1985; Vygotsky, 1978). We have analysed the general part of the curriculum and its content, and highlighted different fragments that connect the new curriculum with the socio-cultural perspective on learning. The connections are shown in Figure 4 where the number in the brackets shows how many times a similar idea has been written in the curriculum.

The socio-cultural theory is based on Vygotsky's (1978) ideas of child development. Vygotsky proposed a framework of concepts that entailed that learning plays a leading role in development. The proposed concepts are interrelated and can only be fully appreciated in the context of their interconnections. (Stetsenko, 1999) There are three major themes in Vygotsky's framework that are analysed in this article in the context of home economics:

1) social interaction, meaning that individual development, including higher mental development, has its origins in social sources;

- 2) tools and signs, since human action, on both the social and individual level, is mediated by tools and signs; and
- 3) the zone of proximal development, as an interactively constructed social and cognitive place where language development occurs as learners participate in meaning-making activities with others (John-Steiner & Mahn, 1996).

# Social interaction

According to the socio-cultural theory, the learner is seen as an active participant in the learning process; the social interactions developed in the process stimulate members of the group to think together. Vygotsky saw the social reality as playing a primary role in determining the nature of internal interpsychological functioning (Wertsch, 1985). For him, any higher mental function was external because it was social at some point before becoming an internal, truly mental function (Vygotsky, 1981). Every function in the child's cultural development appears twice: first, on the social level, and later on the individual level; first between people (interpsychological), and then inside the child (intrapsychological), cited Vygotsky (1978). Therefore, in collaborative learning, the child is neither a passive recipient of knowledge offered by the teacher nor an independent thinker who arrives at his own solutions, but rather a participant in the learning activities shared by children and adults (Kozulin, 1998).

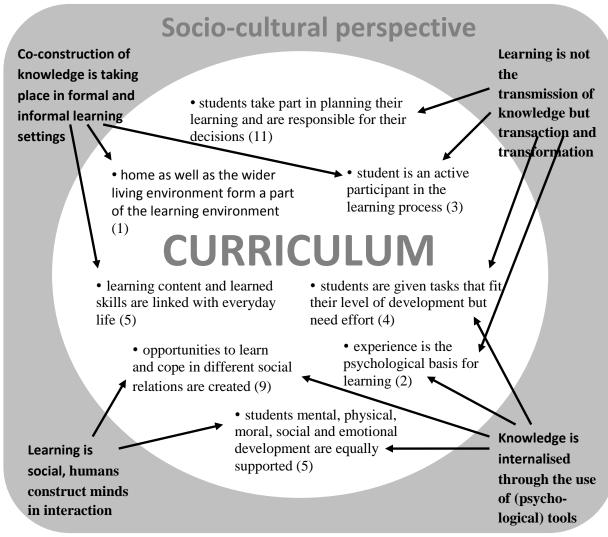


Figure 3. Socio-cultural roots of the Estonian National Curriculum for Comprehensive Schools

As the focus in the socio-cultural learning is on the interpersonal relations and their effect on intrapersonal learning within a group objective (Edwards, 2009), schools should encourage what is social within the child to blossom on an individual basis (Langford, 2005). There is a need to create learning situations that support interaction; as stressed also in the new curriculum (2010). Home economics is a pure example of collaboration and socialisation. Family members interact with each other every day; they work together, share responsibilities and tasks. Knowledge and skills are given from generation to generation. Doing household activities together with family members has been a way to educate children.

Home economics as a school subject allows group work and collaboration. Furthermore, students need to work together in order to complete their learning tasks (Venäläinen, 2010). The socio-cultural learning emphasizes collaboration, both in the social encounters between the teacher and the learner as well as between different learners. According to the previous curriculum, interaction in the Estonian home economics lessons was mainly seen in practical cooking activities. However, in broader understanding, home economics as a subject supports interaction; in some cases even more than other school subjects.

Based on the new Estonian curriculum (2010), the understanding of interaction in home economics lessons has been widened. As the new curriculum has been approved, teachers need to reassess their existing plans of work and the methods that have been used. Still, adding collaborative tasks into the learning process is not a solution in itself. Working in the same place with peers does not always equal collaboration. Classroom activities need to fulfil several criteria in order to be effective and promote interaction; group members should be actively engaged in learning tasks, learning tasks should allow students to use language as a thinking device, students' talk should be on-task and support the meaning-making, the context of the learning tasks should be real and supportive, the learning outcomes should support students' analysis and knowledge construction.

#### Tools

The second part in the Vygotskian socio-cultural framework consists of tools and their functional role in a child's development. Tools are all those physical, linguistic and intellectual means that we use to try to understand our environment and act in it (Venäläinen, 2010). Vygotsky presents three classes of mediators: material tools, psychological tools and other human beings. Material tools (like tools used for cooking or cleaning in home economics classes) are directed at processes of nature, thus they have only an indirect influence on the psychological processes. These tools are central appropriation of knowledge through representational activity by the developing individual. (Kozulin, 1998; John-Steiner & Mahn, 1996)

While physical tools are directed towards the external world, psychological tools are directed internally and are appropriated during activity. Psychological tools mediate the human being's own psychological processes. These tools control the natural behavioural and cognitive processes of the individual. Knowledge is not internalized directly, but through the use of psychological tools. Thus, these tools are not invented by the individual in isolation. They are the products of the socio-cultural evolution to which individuals have access by being actively engaged in the practices of their communities. (Kozulin, 1998; John-Steiner & Mahn, 1996)

As students have different cultural, sometimes even national backgrounds, they all have different understandings about everyday activities. Sharing their experiences allows developing a wider understanding of the everyday life. The home economics education involves the use of material tools in school lessons. The new curriculum has added the need to use psychological tools as well. As an example, Venäläinen (2010) has shown how the multiple uses of these different kinds of tools can enhance the quality of learning during home economics lessons.

#### Zone of proximal development

Vygotsky argued that a child can operate only within certain limits that are strictly fixed by the state of the child's development and intellectual possibilities (Wertsch, 1985), which makes it very important to take into account and use wisely the pupils' different levels of development in the study process. But as pupils can develop also with the help of their more capable peers, Vygotsky introduced the concept of the zone of proximal development (ZPD). ZPD is the distance between the child's

actual developmental level as determined by independent problem solving skills and the higher level of potential development as determined through problem solving skills under adult guidance or in collaboration with more capable peers. (Wertsch, 1985) The zone of proximal development characterizes mental development prospectively and defines those functions that have not yet matured but are in the process of maturation (Vygotsky, 1978). So there are two levels of development and with some help it is possible to gain the potential level of development in the child.

The ZPD is jointly determined by the child's level of development and the form of instruction (oral or written) involved. It is important to notice that it is not just the presence of other, more mature people that is necessary. First, these people must be able to help the learners to develop and enrich the particular psychological tools that are needed; and second, development occurs only when these learners are ready for this next stage of development. (Hall, 2007) Properly organized instruction of the child pulls mental development behind it and brings to life a whole series of developmental processes, thus outside instruction is an internally necessary and universal moment in the process of a child's development (Wertsch, 1985).

Therefore, it is recommended to have mixed ability classes and group work, as these make for better social relations between children and thus a better group, with better all-round development. Group work and cooperation with the more able child will enable the less able to rise to a higher level (Langford, 2005). Home economics is an area where every child has experiences and skills that they can bring into the learning process. It is easier for the home economics teacher to transfer a learned content area from the home context or to apply students' home experiences in school (Venäläinen, 2010). Working collaboratively with tasks which require analysing and sharing ones ideas, knowledge as well as experiences with others is the basis for ZPD to occur. Help that comes from the peers is considered to be more valuable than that from the teacher. As the peers are working on the same problems on a similar level, they are well-equipped to give effective help. In particular, they have the potential for giving understandable, timely explanations. They are together in the problem-solving processes and students may therefore understand better where peers go wrong and what they do not understand. (Webb, 1989)

Based on the above discussion, several criteria have to be fulfilled in order for the socio-cultural learning to occur in the home economics classrooms:

- In order to understand the individual, one must first understand the social relations in which the individual exists. (Wertsch, 1985)
- Teachers need to be aware of the children's historical and cultural setting in which they have lived or live in order to understand their actual level of development (Venäläinen, 2010).
- Classrooms need to have a supportive learning environment, promoting students to share the similarities and differences of their experiences in discussions.
- There needs to be a versatile use of both material and psychological tools; learning tasks need to be designed so that students have to use various tools (Venäläinen, 2010).
- Learning tasks need to be designed so that students reach their ZPD, i.e. tasks should have relevance in relation to everyday life and they should be on a suitable level of challenge (neither too easy nor too difficult for the students).

# Conclusions

In order to improve home economics education, a wider understanding of its content is needed and new directions for its development need to be set. Having the compulsory amount of home economics lessons, set by the curriculum (2010), will predictably widen the subject content. For example, the food-related contents were often comprehended as teaching basic cooking skills, including sometimes knowledge of the basics of nutrition and making comparisons between different food items. Although home economics is much wider than food and eating, even the meaning of these words has been changing over time. Regarding the development of home economics education, the socio-cultural context of the young students should be better acknowledged (Ahava & Palojoki, 2004). Nowadays, food and eating are seen as a way of life. Through consumption of food, one is able to build and shape one's identity. Along with the school, groups of peers and families are important factors affecting students' food-related thinking. However, the challenges for the school and home economics education remain the same: to develop more meaningful learning experiences for students, which also help them to cross the boundary between the everyday life and the school; and to raise their critical consciousness, by helping them to become more ethically and socially aware of the everyday choices they make.

In the light of the new curriculum (2010), the following developments are needed in home economics education in Estonia:

- introducing the broader content of home economics (aspects besides practical food preparation) and the ways to integrate practical and theoretical aspects;
- increasing teachers' knowledge and skills to use methods that support collaboration and students' interaction;
- introducing learning methods that support students to use their previous knowledge in the learning process, also helping them to understand the connection between school knowledge and everyday life;
- developing learning tools that support the socio-cultural learning and thereby leading to qualitatively improved learning outcomes.

Having a new direction in the home economics education and more various tasks to use in lessons, would create an enthralling learning environment, where students are engaged and see the need to participate actively in the learning process. Collaborative learning and interaction in turn would lead to better learning outcomes and help students to transfer school learning into real life situations.

# References

- 1. Ahava A-M & Palojoki, P. (2004). Adolescent consumers: reaching them, border crossings and pedagogical challenges. In: *International Journal of Consumer Studies*, 28, 4, pp.371-378.
- Bryman A. (1988). *Quantity and Quality in Social Research*. Contemporary Social Research: 18. Routledge, London, England.
- 3. Edwards J.-A. (2009). Socio-constructivist and Socio-cultural Lenses on Collaborative Peer Talk in a Secondary Mathematics Classroom. In: Joubert, M (ed.) *Proceedings of the British Society for Research into Learning Mathematics*. Vol 29 (1), pp. 49-54.
- 4. Hall A. (2007). Vygotsky Goes Online: Learning Design from a Socio-cultural Perspective. Learning and Socio-cultural Theory: Exploring Modern Vygotskian Perspectives International Workshop 2007, I (1). [online] [01.12.2011]. Available at: http://ro.uonw.edu.au/llrg/vol1/iss1/6
- 5. Janhonen-Abruquah H.(2010). *Gone with the Wind? Immigrant Women and Transnational everyday Life in Finland*. University of Helsinki, Helsinki, Finland.
- 6. John-Steiner V., Mahn H. (1996). Sociocultural Approaches to Learning and Development: A Vygotskian Framework. In: *Educational Psychologist*. Vol.31(3/4), pp.191-206.
- 7. Kozulin A. (1998). *Psychological Tools. A Sociocultural Approach to Education*. Harward University Press, Cambridge, Massachusetts, p. 41.
- 8. Langford P. E. (2005). *Vygotsky's Developmental and Educational Psychology*. Psychology Press, New York, pp. 124-129.
- 9. Lind E., Pappel K. & Paas K. (2009). Handicaft and Home Economics as Designers of citizen Who Are Able to Cope in Society. In: Fagan, C. (ed.) *Citizenship, Social and Economics Education. An International Journal.* Vol.8:1, pp. 54-62.
- Malin A. (2011). Kotitalouden opetustilat osana kehittyvää oppimisympäristöä asumistoiminnot ja opetussuunnitelma muutoksen määrittäjinä (Home Economics Classrooms as Part of Developing the environment – Housing Activities and Curriculums defining change). University of Helsinki, Helsinki, Finland.
- 11. Paas K. (2007). Loovus kodunduse tundides (Creativity in Home Economics Lessons). In: Soobik M. & Ojaste A. *Töö ja kodunduseõpetus koolis (Craft and Home Economics in School)*. Argo, Tallinn, pp. 31-36. (In Estonian)
- 12. Palojoki P & Tuomi-Gröhn T. (2002). Food choice the importance of everyday context. In: *Journal of the Home Economics Institute of Australia*, 9, 3, pp.12-18.

- 13. Palojoki P. (2003). Food, learning and children crossing the boundaries between school and home. In: *Barn, Norsk senter for barneforskning* 2-3, pp.51-66.
- Põhikooli ja gümnaasiumi riiklik õppekava (2002) (Natioanl Curriculum for Elementary School and Gymnasium), [online] [10.11.2011]. Available at <u>http://www.riigiteataja.ee/ert/act.jsp?id=174787</u> (In Estonian)
- 15. Põhikooli riiklik õppekava (2010) (National Curriculum for Comprehensive School), [online]
  [15.11.2011]. Available at <u>https://www.riigiteataja.ee/akt/114012011001</u> (In Estonian)
- Stetsenko A.P. (1999). Social Interaction, Cultural Tools and the Zone of Proximal Development: In Search of a Synthesis. In: Chaiklin, S., Hedegaard, M, Jenssen, U.J. (eds.) (1999). Activity Theory and Social Practice. Alden Press: Oxford, pp. 235-252.
- 17. Taylor S.J., Bogdan R. (1984). Introduction to Qualitative Research Methods: The Search for Meanings. 2nd ed. John Wiley and Sons: New York
- Tuomi-Gröhn T. & Palojoki P. (2000). Studying human action in the households the contribution of contextual approaches. In: *Canadian Home Economics Journal* 50, 3, pp.113-120
- 19. Venäläinen S. (2010). Interaction in the Multicultural Classroom: Towards Culturally Sensitive home Economics Education. Home Economics and Craft Studies Research reports 25. University Print, Helsinki, pp. 25-35.
- 20. Vygotsky L.S. (1981). The Instrumental Method on Psychology. In: Wertsch, J.V. (ed and trans). *The Concept of Activity in Soviet Psychology*. Armonk, New York, p. 162.
- 21. Vygotsky L.S. (1978). *Mind in Society. The Development of Higher Psychological Processes*. Harvard University Press, Cambridge, pp. 57-87.
- 22. Webb N. M. (1989). Peer Interaction and Learning in Small Groups. In: *International Journal of Educational Research*. Vol.13, pp. 21-39.
- 23. Wertsch J. V. (1985). *Vygotsky and the Social Formation of Mind*. Harvard University Press, Cambridge, pp. 58-72.

# **REALIZATION OF PROFESSIONAL COMPETENCES OF FUTURE TECHNOLOGY TEACHERS DURING PEDAGOGICAL PRACTICE**

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**Abstract:** The basic feature of the modern society is constant change and permanent renewal. The aim of the work is to analyze peculiarities of the realization of future technology teachers' professional competences during pedagogical practice. The research method - a qualitative content analysis. The respondents were five daytime students, five extra-mural students of Vilnius pedagogical university and ten teachers mentors. The acquired results of the research have revealed the following tendencies: trainees are good at motivating and supporting their learners; students apply various techniques, methods and strategies of evaluation of learners' achievements; trainees have developed a good competence of managing the teaching / learning process; teacher mentors have positively evaluated students' competence of planning the content of the subject; future technology teachers attach great significance to lifelong learning.

Keywords: professional competences, future technology teachers, pedagogical practice.

#### Introduction

Changes in the educational system of Lithuania significantly increase public expectations for teachers' competences. Legal acts of the Parliament of the Lithuanian Republic and of its Ministry of Education and Science determine that teacher training should be focused on the changing teacher's roles in knowledge society and on the new competences and values that are crucial for the modern teacher. Regardless of the teacher training method, the studies have to ensure that the graduate has acquired sufficient subject-specific knowledge and skills, has developed certain values, is aware of educational phenomena and the teaching process and is able to apply the acquired knowledge and skills in his/her professional career.

In Lithuania teacher professional competences are regulated in the Description of Teacher's Professional Competences. Teacher's professional competences include intercultural, professional, general and special competences. Professional competences comprise application of information technologies, creation of teaching / learning environments, planning and developing the content of the subject, management of the teaching / learning process, evaluation of learners' achievements and progress, learners' motivation and support for them, learners' cognition and recognition of their progress, and professional development.

A number of foreign scientists (J. M. A. Ritz (2010), S. Vaidya & D. Urias (2009), J. K. Kotrlik & D. Redmann (2009), O. Jolly & O. Aluede (2009), E. Dvoriankina (2007) have widely analysed teachers' professional competences.

According to V. Grincevičienė (2004), the teacher is an individual who participates in the teaching process as an indivisible unit who does not isolate his/her mind from his/her feelings, spiritual features from physical ones. Therefore, the scope of teacher's competences and qualification is quite wide, and public expectations for teacher's personality are rather high and are constantly growing. According to K. Trakšelis (2008), it is crucial for the competences of the modern teacher who works at school to thoroughly cover both pedagogical, subject-based, scientific skills and managerial, social, psychological, lifelong learning, information-oriented, and ethical skills.

It is practical work that shows whether a young teacher has acquired sufficient knowledge and is able to work on his/her own. Pedagogical practice is the educational space where pedagogical competences and their quality are revealed (Barkauskaité & Pečiuliauskienė, 2007).

Despite extensive research in the field of technological education (J. Dockstader (2010), J. Flowers (2010), L. Gray, N. Thomas & L. Lewis (2009), W. J. Haynie (2008)), there is a shortage of research analyzing professional competences of future technology teachers.

The research object is professional competences of future technology teachers.

**The aim of the work** is to analyze peculiarities of the realization of future technology teachers' professional competences during pedagogical practice.

# **Materials and Methods**

This research on the realization of future technology teachers' professional competences is based on a *qualitative research* method. An interview method was applied to collect data for the qualitative research. A *semi-structured interview* method was chosen where the procedures and questions are only partially standardized: a plan of the interview as well as the topics for communication with respondents were designed in advance (Tidikis, 2003).

A qualitative *content* analysis method (categorization of the answers) was applied to interpret the data of the qualitative research. To prove reliability and validity of the research, comparison of the results of *content* analysis with the results of similar researches was performed (Martišauskienė, 2010).

One group of the respondents included five four-year daytime students and five four-year extramural students of pedagogy of technologies who had their pedagogical practice in 2011. The other group of the respondents of this qualitative research was made of ten teacher mentors of the aforementioned student teacher trainees; their distribution according to their qualification categories was eight senior teachers and two teacher methodologists.

# **Results and Discussion**

Analysis of the respondents' viewpoint on peculiarities of the realization of future technology teachers' professional competences during pedagogical practice. To disclose those peculiarities of the realization of future technology teachers' professional competences during pedagogical practice, using an interview method and a non-standardized questionnaire, students of pedagogy of technologies were asked what they think about their professional competences and their realization during pedagogical practice and their teacher mentors were given questions about the skills of students of pedagogy of technologies to creatively implement the theoretical and practical knowledge they have acquired (Table 1).

*Content* analysis of the acquired data enabled to distinguish a category of *peculiarities of the realization of future technology teachers' professional competences* which was subdivided into the following subcategories: realization of the competence of applying information technologies, realization of the competence of creating teaching / learning environments, realization of the competence of evaluating learners' achievements and progress, realization of the competence of managing the teaching / learning process, realization of the competence of motivating learners and supporting them, realization of the competence of learners' cognition and recognition of their progress, and realization of the competence of professional development.

*Peculiarities of the realization of the competence of applying information technologies.* A number of Lithuanian researchers (K. Nekrašaitė & T. Petkus (2009), P. Pečiuliauskienė (2008), V. Targamadzė & V. Butkutė (2010)) have analysed application of information and computer technologies in the pedagogical system. Foreign scientists such as A. Brown (2009), W. J. Haynie (2010), J. Flowers (2010), J. Dockstader (2010), J. K. Kotrlik & D. Redmann (2009) emphasize its importance, as well. General Curricula Framework for Primary and Basic Education (2008) stresses the significance of acquiring pedagogue's ICT competence for teachers of technologies. In lessons of technologies learners are expected to apply information technologies to search for ideas for various projects, to revise and collect information, to present the projects they have developed (General Curricula Framework for Secondary Education: Technologies, 2010).

The quality of the content of classes of technologies depends on technology teacher's abilities to apply modern information and communication means, to find, process and to present information. K. Trakšelis (2008) argues that ICT helps to create a new, enriched variety of information sources and communication means, a new learning environment which enables easier development of critical thinking skills, integration of different subjects, application of active teaching methods, development of child's individual abilities, teaching group work and individual work.

Table 1

Category	Subcategory			
Students' viewpoint				
Peculiarities of the realization of future technology teachers' professional competences	Realization of the competence of applying information technologies (10 answers)			
	Realization of the competence of creating teaching / learning environments (5 answers)			
	Realization of the competence of planning and developing the content of the subject (9 answers)			
	Realization of the competence of evaluating learners' achievements and progress (12 answers)			
	Realization of the competence of managing the teaching / learning process (11 answers)			
	Realization of the competence of motivating learners and supporting them (7 <i>answers</i> )			
	Realization of the competence of learners' cognition and recognition of their progress (4 answers)			
	Realization of the competence of professional development (7 answers)			
Technology teachers' viewpoint				
Peculiarities of the realization of future technology teachers' professional competences	Realization of the competence of applying information technologies (8 answers)			
	Realization of the competence of creating teaching / learning environments (4 answers)			
	Realization of the competence of planning and developing the content of the subject (9 answers)			
	Realization of the competence of evaluating learners' achievements and progress (5 answers)			
	Realization of the competence of managing the teaching / learning process (13 answers)			
	Realization of the competence of motivating learners and supporting them (10 answers)			
	Realization of the competence of learners' cognition and recognition of their progress (6 answers)			
	Realization of the competence of professional development (6 answers)			

# **Respondents' answers on peculiarities of the realization of future technology teachers' professional competences**

The results of the research have revealed that application of information and communication technologies is a common process for the future technology teachers and it does not require big efforts: "I presented theoretical material of the lesson using slides", "I used slides where I tried to present important information in an interesting way and uploaded some photos there as well." This was confirmed by the teachers of technologies, too: "The students applied information technologies to prepare teaching material and technological cards", "presented theoretical and visual material".

According to K. Nekrašaitė & T. Petkus (2009), ICT is becoming one of the most important elements of the teaching / learning environment which enables an increase of education efficiency and access of the latest resources in the education process, thereby enhancing attractiveness of the curriculum content.

V. Targamadzė & V. Butkutė (2010) analyse one more possibility to apply ICT: a possibility of educational technology interface between intentional computer games and qualitative teaching process in general education institutions of the  $21^{st}$  century. The assumption that computer games can be used for learners' stimulation and motivation was first studied in the world in the last decade when scientific researches have proved that they can be used for teaching / learning purposes. This question has extensively been analysed by J. Dockstader (2010), L. Gray, N. Thomas & L. Lewis (2009).

*Peculiarities of the realization of the competence of creating teaching / learning environments.* Modern education theories emphasize pupils' learning through interaction with their teacher and the education environment when learners themselves create their own learning environments. L. Šiaučiukėnienė et al. (2006) define the teaching / learning environment as dynamic teaching and learning space that is created and influenced by the educator and determined by the goal of education. P. Jucevičienė & D. Lepaitė (2000) stress that not every education environment becomes one's learning environment. The educatee must be motivated to use it, and, on the other hand, he/she must be able to use it.

The participants of the qualitative research believe that special attention should be given to rational organization of work places in technological workshops; they have to meet the set norms of hygiene ("I always stressed the importance to maintain cleanliness") as well as work safety requirements ("I paid a lot of attention to safe behaviour during practical tasks when learners worked with sharp tools"). The teacher mentors liked such students' choice: "I was totally satisfied with how the students supervised learners' work during practical tasks when they used scissors or needles".

It was noticed that for the future technology teachers who took part in the survey creation of emotional environment when learners' social, intellectual and spiritual development is supported in the class is no less important than physical teaching / learning space: "In the lessons I tried to avoid emotional stress, to create the relationship between the learners and myself as well as among the learners in the class based on respect and tolerance", "I find it important that learners worked individually and possessed self-confidence".

The respondents' answers (both students' and teachers' ones) such as "*I was ready to create proper environment and I did it best*", "*I was very good at creating education environment, maintaining good atmosphere, where the learners felt safe*", "*I was completely satisfied with this student's competence*" enabled us to assume that future technology teachers are able to create teaching / learning environments. O. Jolly & O. Aluede (2009) argue that for the productivity of learning to improve, it is important to feel the atmosphere of the class and to head it towards the right direction, try to avoid tension in the class so that learners could feel emotionally safe.

*Peculiarities of the realization of the competence of planning and developing the content of the subject.* L. Šiaučiukėnienė et al. (2006) note that the curriculum content is one of the most crucial parts of education that highlights the specifics of the subject, cultural experience of the society and its philosophy that is constantly re-evaluated and implemented in pedagogical practice and self-development. The teaching methods that the teacher chooses must ensure that learners acquire sound knowledge, develop their practical and intellectual skills as it is best possible, develop their world-view and character, harden their will and learn to live and work on their own. A. Galkienė & A. Cijūnaitienė (2007) argue that the criteria for choosing teaching methods show general tendencies: learners' capabilities, the curriculum content, teacher's capabilities and experience, and learning conditions.

When planning and developing the content of the subject, future technology teachers focus on the paradigms of interaction and learning. The students said that when formulating the goals of the lesson and the teaching / learning goals, they used to discuss their purposefulness with the learners: "When preparing for a lesson I used to set a clear goal and objectives to achieve it. I used to discuss the goal and the objectives together with the learners." A few student respondents mentioned that they encouraged "learners to set the goal of the lesson themselves".

In their classes future technology teachers applied not only methods that are characteristic of the impact paradigm, namely explanation, questioning, writing, text reading, a school lecture, but also modern teaching / learning methods that are characteristic of the interaction and learning paradigms: "*I applied <such methods as> a discussion, group work, individual work, research work, search for information, self-study methods*"; "*I encouraged learners to ask questions, to analyze, to solve problems, to explore*"; "*I suggesting doing an experiment*"; "*I often have to apply the active teaching methods, <...> I try to make them find the information themselves and present it for me*". The teachers of technologies who participated in the survey confirmed these students' statements. They think that the students "*used to choose various teaching methods*".

Analysis of the research data revealed that most of the teacher mentors evaluated this competence of the future technology teachers very well: "I was surprised at their first lesson plans because they did this with great responsibility"; "planning the content of the lesson curriculum is one of the strongest student's competences". However, almost all the teachers of technologies who took part in this survey also admitted that the students lacked practical skills of this competence, therefore at the beginning of the pedagogical practice they had to help them: "*They prepared the plans themselves, they were in need of help only at the very beginning*"; "*When planning, we used to discuss <the plan>,* <...> then they would prepare the plans themselves".

According to E. Motiejūnienė & L. Žadeikaitė (2009), in developing the curriculum content there has been a shift from strictly separated subjects content in the syllabus where the focus was on mechanical learning of facts by heart to integral curriculum content that could help all learners develop vital general skills and competences that are necessary for everyone to make independent decisions and to be responsible for them. The present curriculum content is in the process of constant development; it is constantly developed, implemented, evaluated and updated.

*Peculiarities of the realization of the competence of managing the teaching / learning process.* "Teacher's innovative work that integrates educational and managerial approaches to learning" has become crucial today (Šiaučiukėnienė et al., 2006: 211). In the teaching process the teacher aims for certain goals that consequently affect learners' behaviour, while the learners who come to the class, too, have their own goals. "The optimal blend of these goals is the key issue of management" (Šiaučiukėnienė et al., 2006: 213). The teacher is in charge of control and management of the teaching / learning process and has to know the basic functions of management.

Analysis of the collected research data suggests that the teachers of technologies who participated in this survey assess students' competence of managing the teaching / learning process rather well: "She was rather good at it"; "It was not difficult for her to control the class"; "The classes were rather diverse, and I saw how the students tried to do their best, and they were good at it"; "Let's say, they were rather good at it"; however, "they sometimes needed my help", "I had to demonstrate them a little, to explain <how to work>". The students think that they "managed to control the class" but felt "a lack of practical skills", so they were afraid of not being able to cope with that. The students said that they knew this in theory, but they "still were afraid to enter the classroom"; "conflict management in the class is the field for improvement"; "I sometimes had to be strict". The teachers of technologies also noted that the students not always were able to keep the learners' attention till the end of the lesson: "It was easier to discipline the class at the beginning of the lesson". In teachers' opinion, the issue of managing the class and its conflicts can be solved with the help of pedagogical work experience and getting to know the learners closer.

Teacher's managerial competence is important in the teaching process both to achieve its higher efficiency and to ensure a closer relationship between the teacher and the learner. The issue of identifying and evaluating the competence of managing the teaching / learning process has been particularly relevant in this century (Howard, 2009).

*Peculiarities of the realization of the competence of evaluating learners' achievements and progress.* The *competence of evaluating learners' achievements and progress* is very significant in education process as it helps to improve its quality (Rodzevičiūtė, 2006). Evaluation is meaningful only if it directly or indirectly encourages students to learn and when it is understood as progress that every learner makes in the education process.

All the future technology teachers who took part in this survey applied various strategies, techniques and methods for evaluating learners' achievements: "I often applied informal evaluation: stimulation, encouragement, praise"; "Formal evaluation is also necessary to assess their knowledge"; "I applied both formal and informal evaluation. And when giving a mark, I always stress why and for what I write this and not the other evaluation".

Future technology teachers believe that it is very important for teachers to discuss evaluation criteria with their learners before starting the work. Their statements confirm that: "*I tried to give clear evaluation criteria for the learners and informed them*"; "At the beginning of the class I always introduce evaluation criteria". The future technology teachers also used to ask their pupils to self-evaluate their work, to evaluate the result or the process.

Analysis of the respondents' answers revealed that there were problems with evaluation and giving feedback on schoolchildren's learning process. Such students' statements as "*I used to evaluate* 

the tasks done together with the learners. I paid a lot of attention to their discussion. I think that I did rather well, but it was not so easy." prove that the students who participated in this survey had problems when evaluating learners' achievements. The future technology teachers said that they faced difficulties evaluating achievements of learners with special needs: "It is challenging to evaluate schoolchildren who learn according to adapted or modified study programs", "to teach and evaluate learners with special needs".

The teacher mentors think that students' competence to evaluate learners' achievements and progress is rather good as, to quote the teachers, "the students coped well", "they were good at evaluating learners", "their evaluation was very good, they did that like professional teachers". However, it was also noticed that due to lack of practical skills and the specifics of the subject of technologies there were some difficulties evaluating learners' achievements.

Discussion of the competence of evaluating learners' achievements and progress reveals such problems as willingness to apply traditional evaluation methods and wish to avoid subjectivity. R. Laužackas et al. (2008) argue that teachers tend to apply traditional evaluation methods that enable them to evaluate learners' acquired knowledge at once and that they lack experience of applying those evaluation methods that would evaluate learners' acquired skills and abilities to apply knowledge. The issue of subjectivity and bias of evaluation is one of the oldest and most relevant problems even nowadays. According to T. Bulajeva (2007), search for solutions of this problem has led to change and development of the attitude towards evaluation and of the process of evaluation itself. However, when a number of different evaluation techniques mix, tension and problems are still felt.

**Peculiarities of the realization of the competence of motivating learners and supporting them.** The teaching process should ensure learning motivation: teachers have to help their learners understand its importance and to organize education as support for learning so that education process gave pleasure both to the learner and the teacher. According to M. Barkauskaitė & E. Motiejūnienė (2004), motivation is the process that encourages a person to behave in such a way that his goals are achieved, his expectations and needs are met; the strongest motivation is related to student's value system, to the development of his identity and to his perception of the importance of learning.

It was noticed that the students participating in the survey paid a lot of attention to individualization of the education process. Such students' statements as "I tried to motivate learners, to present relevant and interesting material, to get the learners interested <in the lesson> and to stimulate productive practical work", "I used to come up to everyone to help" show that the future technology teachers organized attractive learning activities. The teacher mentors also confirmed students' competence to help their learners: "They used to come up to every pupil"; "The students managed to come up to every pupil, to help them, and gave attention to everyone".

The research revealed that the future technology teachers were managers and organizers of the education process ("*They advised, helped, let <their learners*> *look for solutions themselves*"; "*they valued children's opinion, encouraged their self-confidence*") who consult with learners when making decisions. The teacher is a learning adviser (consultant), a specialist and an assistant: "*It's a pleasure to see a pupil who is interested and who does experiments. I can see that the process of creation is interesting for them.*" He/she applies his/her knowledge and skills to help his/her learners cope with their problems in the learning process: "*They used to overcome learning difficulties together.*"

Analysis of the students' answers showed that all the future technology teachers who took part in this survey evaluated their competence of motivating learners and supporting them very well: "I think I succeeded in getting the learners interested"; "My strong point is learners' motivation". Students' competence to motivate learners and support them was also positively evaluated by the teacher mentors, which can be seen from their answers: "very good"; "I give positive evaluation"; "Everything was fine, I have no reproaches"; "The student teacher trainee managed to involve learners into active work."

E. Rodzevičiūtė (2007) grouped abilities comprising motivation competence into teacher's ability to encourage learners to perceive the importance of the activity, ability to strengthen students' learning motivation, and ability to develop their positive attitude towards learning.

**Peculiarities of the realization of the competence of learners' cognition and recognition of their progress.** Analysis of the *future technology teachers' competence of learners' cognition and recognition of their progress* has revealed that the respondents tend to evaluate this professional competence they have well and they believe that recognition of learner's individuality helped them involve learners into the teaching / learning process. The teacher mentors also noticed future technology teachers' competences and willingness to get to know their learners and recognize them and gave positive evaluations: "*<The students> asked their learners how they felt*", "I noticed that they were really interested in cognition of every pupil and if they failed, they cared about that and tried to find out what was wrong".

Analysis of the research data showed that at the beginning of the pedagogical practice the future technology teachers faced with some problem getting to know their pupils. This, however, is natural since the process of getting to know one's learners is long and continuous; the teacher mentors emphasized that too: "The student put in a lot of effort, but it takes time, every day she finds out something new about her learners"; "At first it was difficult to identify pupils' different attitudes to learning and to try to create learning possibilities"; but, in teachers' opinion, later everything was settled down: "After two weeks passed, the students felt better since in any way you somehow start communicating both one-to-one with pupils and with the whole class, and you find out what is necessary to create learning possibilities".

Both the students and the teachers of technologies say that students' ability to identify learners' special needs still has to be improved: "It would be difficult to identify learners' special needs and to provide them additional help"; "I think that students would face with difficulty identifying learners' special needs if required". Working with pupils who have special needs is very important. Integration of such children is a relatively new phenomenon, that's why it causes certain difficulties. "Teachers must acquire some new competences such as knowing how to teach taking individual needs into account and accordingly individualizing the curriculum" (Barkauskaite & Pečiuliauskiene, 2006: 47).

**Peculiarities of the realization of the competence of professional development.** Teachers should be ready for lifelong learning because knowledge necessary for their work changes together with new requirements as well as scientific and technological progress (Trakšelis: 2008). Analysis of the collected research data shows that students tend to believe that lifelong learning is crucial: "It is always necessary to update one's knowledge because technological processes and tools are constantly developing"; "I want to develop, that's why I try to find out something new, to learn more, to search for information..."

Constant changes of competence requirements create the need for constant knowledge updating since after some time any acquired competence does not meet new requirements: "Nothing is stable, everything changes, that's why you always have to study. If you adapt to that change, it will be easier to present your pupils what new you have found out"; "I think that there is always room for perfection in one's professional field"; "It is always interesting to learn something new." The teacher mentors who participated in this survey believe that "it is necessary for teachers of technologies to have information on modern technologies" and it is very important that "the students understand that."

The research has revealed that the teachers of technologies feel that the students are able to constructively respond to criticism, are open to advice: "I think that the student teacher trainee is open to criticism and novelties"; "<the student teacher trainee> followed my instructions and advice"; "<the student teacher trainee> asked for <my> advice and we together discussed what would work best". It is impossible to acquire some competence once and for all your career, therefore the teacher has to focus on constant development of his/her professional competence, and B. Simonaitiene & V. Targamadze (2001), R. Adamoniene (2001) emphasize that. According to the authors, it is very important for the teacher not to fall behind changes in the needs of the society and learners and to match its dynamics.

# Conclusions

The acquired results of the research on peculiarities of the realization of future technology teachers' professional competences during pedagogical practice have revealed the following tendencies:

- student teacher trainees are good at motivating and supporting their learners;
- students apply various techniques, methods and strategies of evaluation of learners' achievements but face with problems when evaluating achievements of learners with special needs;
- student teacher trainees have developed a good competence of managing the teaching / learning process but they experience difficulties with controlling learners' behaviour during lessons;
- when planning and developing the content of the subject, students emphasize learning as the core of the education process and follow the paradigms of interaction and learning;
- teacher mentors have positively evaluated students' competence of planning the content of the subject but accentuated their lack of practical skills;
- student teacher trainees are able to create teaching / learning environments and use ICT in technology classes;
- future technology teachers attach great significance to lifelong learning.

# References

- 1. Adamonienė R. (2001). *Profesijos pedagogo veiklos bazinė paradigma* (Basic Paradigm of Vocational Teachers), *Pedagogika*, t.50, p.3-11. (In Lithuanian)
- Barkauskaitė M.; Pečiuliauskienė, P. (2007). VPU studentų pedagoginių kompetencijų raiška švietimo kaitoje (Realization of VPU Students' Pedagogical Competences in View of Educational Change), Pedagogika, t. 85, p. 43-53. (In Lithuanian)
- 3. Brown R. B. (1999). Retraming the Competency Debate: management knowledge and metacompetence in graduate education, *Management Learning*, No. 25, p. 289-299.
- Bulajeva, T. (2007). Žinių ir kompetencijų vertinimas: kaip sukurti studentų pasiekimų vertinimo metodiką. (Evaluation of Knowledge and Competences: How to Create a Methodology for Assessing Students' Achievements). Vilnius: UAB "Petro ofsetas", p. 31-43. (In Lithuanian)
- 5. Dockstader J. *Teachers of the 21st Century Know the What, Why and How of Technology Integration. Questia: trusted online research.*[online] [30.11.2010]. Available at <a href="http://www.questia.com/googleScholar.qst?docId=5001230935">http://www.questia.com/googleScholar.qst?docId=5001230935</a>>.
- 6. Flowers J. (2010). The Problem in Technology Education. *Journal of Technology Education*, Vol. 21 No. 2, Spring 2010, p. 10-20.
- Gray L., Thomas N., Lewis, L. *Teachers' Use of Educational Technology in U.S. Institute of education sciences*, [online] [30.11.2010] Available at <a href="http://www.eric.ed.gov/PDFS/ED509514.pdf">http://www.eric.ed.gov/PDFS/ED509514.pdf</a>>.
- 8. Grincevičienė V. (2004). Mokytojo kompetencijos: į pedagogo asmenybę orientuoti moksleivių lūkesčiai (Teacher's Competences: Students' Expectations Related to Teacher's Personality), Pedagogika. t. 71, p. 51-55. (In Lithuanian)
- 9. Haynie W. J. (2008). Are We Compromising Safety in the Preparation of Technology Education Teachers? *Journal of Technology Education*, Vol. 19 No. 2, Spring 2008, p. 94-98.
- 10. Howard B. B., White S. R. (2009). Spiritual Intelligence and Transformational Leadership: A New Theoretical Framework, *Journal of Curriculum and Instruction*, Vol. 3, No. 2, p. 54-67.
- 11. Jolly O., Aluede O.A., Ojugo A. I. (2009). A psychological postulation for the understanding of classroom emotional abuse, *European Journal of Educational Studies*, No. 1(3), p. 125-131.
- 12. Jucevičienė P., Lepaitė D. (2000). *Kompetencijos sampratos erdvė* (The Concept of Competence), *Socialiniai mokslai (Social Science)*, Nr. 1, p. 44-50. (In Lithuanian)
- Kotrlik J. W., Redmann D. H. (2009). Technology Adoption for Use in Instruction by Secondary Technology Education Teachers, *Journal of Technology Education*, Vol. 21 No. 1, Fall 2009, p. 44-59.
- 14. Laužackas R., Gedvilienė G., Tūtlys V. ir kt. *Mokytojų kvalifikacijos tobulinimo poreikiai* (Teachers' Needs for Professional Development), *Pedagogika*, 2008, t. 89, p. 29-44. (In Lithuanian)

- 15. Martišauskienė E. (2010). *Mokytojų požiūris į gebėjimus kaip profesijos kompetencijų dėmenį* (Teachers' Approach to Skills as Part of Professional Competences). *Acta Pedagogica Vilnensia*. t. 24, p. 101-113. (In Lithuanian)
- Motiejūnienė E., Žadeikaitė L. (2009). Kompetencijų ugdymas: iššūkiai ir galimybės (Competences Development: Challenges and Possibilities), Pedagogika, t. 95, p. 86-93. (In Lithuanian)
- 17. Nekrašaitė K., Petkus T. (2009). *Informacinių technologijų naudojimas mokymui* (Using Information Technologies for Education). *Informacijos mokslai*, t. 50, p. 112-116. (In Lithuanian)
- 18. Pečiuliauskienė P. (2008). *Kompiuterizuoto mokymo metodai pradedančiųjų mokytojų edukacinėje praktikoje* (Computer-Assisted Teaching Methods Used by Beginning Teachers in Practice), *Pedagogika*, t. 89, p. 64-69. (In Lithuanian)
- 19. *Pradinio ir pagrindinio ugdymo bendrosios programos* (General Curriculum Framework for Primary and Basic Education). (2008). Vilnius: Švietimo aprūpinimo centras, p. 1231-1265. (In Lithuanian)
- 20. Ritz J. M. A New Generation of Goals for Technology Education, *Journal of Technology Education*, Vol. 20 No. 2, Spring 2009, p. 50-64.
- Rodzevičiūtė E. (2007). Būsimųjų mokytojų vadybinio kompetentingumo formavimas (Development of Future Teachers' Management Competence), Pedagogika, t. 85, p. 36–41. (In Lithuanian)
- 22. Simonaitienė B., Targamadzė V. (2001). *Mokytojų profesinė kompetencija: jos plėtotės darbo vietoje galimybių tyrimas* (Teachers' Professional Competence: Study of Possibilities of Its Development in Workplace), *Socialiniai mokslai*, nr. 3, p. 33-41. (In Lithuanian)
- 23. Šiaučiukėnienė L., Visockienė O., Talijūnienė P. (2006). *Šiuolaikinės didaktikos pagrindai* (The Basics of Modern Didactics). Kaunas: Technologija, p. 192-219. (In Lithuanian)
- 24. Targamadzė V., Butkutė V. (2010). *Kompiuteriniai tiksliniai žaidimai kaip pedagoginės* sistemos kaitos agentas (Target Computer Games as an Agent of Change in Educational System). Proceedings of Conference "*Inovatyvios e. mokymosi kryptys*"(Innovations in estudies), Kaunas University of Technology, Kaunas, Lithuania, pp. 57-64. (In Lithuanian)
- 25. Tidikis R. (2003). *Socialinių mokslų tyrimų metodologija* (Social Science Research Methodology). Vilnius: VTLC, 626 p. (In Lithuanian)
- 26. Trakšelys K. (2008). *Mokytojų požiūris į profesinius reikalavimus* (Teachers' Standpoint to Professional Requirements), *Pedagogika*, t. 92, p.7-13. (In Lithuanian)
- Vaidya, S.; Urias D. Teacher Competencies for Developing the Global Perspective. *Paper presented at the annual meeting of the ATE Annual Meeting, Hyatt Regency Dallas, Dallas* [online] [20.01.2010]. Available at http://www. allacademic.com/meta/p276890\_index.html>.
- Vidurinio ugdymo bendrosios programos: technologijos (General Curriculum Framework for Secondary Education: Technology Education). Pedagogika [online] [03.12.2010]. Available at: <u>http://www.pedagogika.lt/index.php?159258531</u>. (In Lithuanian)
- 29. Дворянкина Е. К. (2007). Профессионалная подготовка будущих учителей в вузе как педагогическая проблема (Future Teachers' Professional Preparation in Universities as a Pedagogical Issue), Современные проблемы науки и образования (Current Issues in Science and Education), №. 5, 47-51. (In Russian)

# Life quality in the context of home environment home

# METHODOLOGY STRUCTURE FOR TRAINING TEACHERS OF HOME ECONOMICS AND TECHNOLOGIES

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**Abstract:** Education occupies an important place for future education, which covers the development of main skills, for example, analytical thinking, ability to work as a team, self-reliance, initiative combined with professional competence, methodological competence and personal competence. Home economics and technologies study subject includes both theory and practical side. Home economics and technology teacher is an ongoing student work organizer at school activities and also in out of school activities, that is why the very important role is given to the teacher's methodical training in theoretical, practical and organizational aspects. The aim of the article is to raise awareness and to pay special attention to the methodology of the Home economics and technology study subject training, about the regularities of the learning process, specific components of the technical and pedagogical elements to be used for Home economics and technology training. There are developed *Methodology Structure for Training Teachers* of *Home Economics and Technologies* and it is part of established study course *Teaching methodology of Home Economics* in e-studies environment *MOODLE* for training teachers of Home economics and technologies during 2011, which is tested during the practical work with students of study programs *Home environment and visual arts in education* and the *Home environment and informatics in education* students for full-time and part-time students.

Keywords: education, home economics and technology, methodology structure.

#### Introduction

Home Economics (HE) is a field of study and a profession, situated in the human sciences that draws from a range of disciplines to achieve optimal and sustainable living for individuals, families and communities. Its historical origins place Home Economics in the context of the home and household, and this is extended in the 21st century to include the wider living environments as we better understand that the capacities, choices and priorities of individuals and families impact at all levels, ranging from the household, to the local and also the global community. Home Economists are concerned with the empowerment and well-being of individuals, families and communities, and of facilitating the development of attributes for lifelong learning for paid, unpaid and voluntary work; and living situations. Home Economics professionals are advocates for individuals, families and communities (IFHE, 2011).

Home economics is described as an 'interdisciplinary' and a 'multi-disciplinary' profession, with the importance of families at the core of everything undertaken by professionals in the field. "Although it is multi-disciplinary, it does not teach a skill for the sake of that skill, it teaches for application, it teaches for informed decision making, it teaches evaluative and critical thinking skills, it empowers individuals no matter what their context." (Pendergast, 2006)

In today's mobile global society there is a need for a consistency of common language across recognised international frameworks of educational knowledge. The International Federation for Home Economics (IFHE) formalised an international understanding of home economics: "The study of household management for achieving the highest quality of life" (IFHE, 2004). IFFE advocates the need for home economists to teach vital and culturally integrated theory for human capacity building, and identifies the present challenges for home economists as sustaining a better quality of life and conveying life competencies. In addition, home economics must be seen in the context of 'family studies', and in a holistic context. The description is further expanded as:

- improvement of the quality of everyday life for individuals, families and households through the management of their resources,
- highlighting the impact of the social, economic and environmental impact on the management of everyday life of individuals, families and households, and

• expanding the understanding of the ecological view of the individuals, families and households in the larger environment (IFHE, 2004).

Nowadays much is discussed on the home economics, household curricula content learning in schools. Consequently with the Latvia Republic accession to the European Union public perceptions of home economics and technologies content and its need for today's school is changing. In many European countries home economics and technologies, household study subject decreases or disappears at all and the ancient handicrafts forms and ethnographic heritage is no longer considered as a priority. The traditional culture is still survived in Latvia as typical national feature and part of study content of home economics and technologies. Our task is to promote and maintain the traditional culture in nowadays school curricula and take care of the national traditional cultural wealth transfer to the future generations.

General education plays an important role in future education, which will cover development of the major skills, for example, analytical thinking, ability to work as a team, independence, selfinitiative combined with professional competence, methodological competence and personal competence. Home economics and technology study subject includes both theory and practical side. Home economics and technology teacher is an ongoing student work organizer in both in school activities and in out of school activities. Teacher's work success is largely determined by her/his good background and readiness of theoretical and practical training and organizational skills.

The education establishments should encouraged students' interest to learn through studentcentered approach in education, there should be wider use the information technologies in training several study subjects by organizing virtual environment. Also practical tasks should be integrated into students' education and regular practice should be organized in the labor market in close cooperation with employers (Dišlere, 2011, 32).

We have been using the term "didactics" to describe the "science or art of teaching". The concept is well-accounted for in the Dutch, German and French literature. It covers the whole range of activities - instructional design, teaching models, assessment practices, human development and curriculum development. However, because of the transmission mode of delivery linked to the science, many academics are now shifting towards "learning practices". (Fraser, 2000).

Concerning with the text above it is obvious why the very important role is given to the teacher's methodical readiness in training in theoretical, practical and organizational aspects.

The aim of the article is to raise awareness and to pay special attention to the training methodology of the Home economics and technology study subject, about the regularities of the learning process, specific components of the technical and pedagogical elements to be used for Home economics and technology training.

#### Materials and methods

The main focus of this paper is on the theoretical discussion of didactics and methodology of training home economics. The present paper contains bibliography analysis, observations and the analysis of practical experience. Based on the author's many years of wide work experience there are developed *Methodology Structure for Training Teachers* of *Home Economics and Technologies* and it is part of established study course *Teaching methodology of Home Economics* in e-studies environment *MOODLE* for training teachers of Home economics and technologies during study year 2010-2011, which is tested during the practical work with students of study programs *Home environment and visual arts in education* and the *Home environment and informatics in education* students for full-time and part-time students. Totally 24 students were involved in testing the e-study materials using Methodology Structure.

#### **Results and discussion**

Didactics is the teaching science which develops education and learning theory. Basic problems of didactics are discovering the regularities of the learning process, discovering the study content (curriculum), rising efficiency of teaching methods and organization.

Didactics is educational theory (sub-branch of pedagogy science), which examines the education and teaching theoretical foundations - universal legitimacy, objectives, methods, tools and results. It

covers theories of learning issues, develops planning basics of curriculum, teaching methods, organizational forms. (Lasmanis, 2011).

This article focuses on **e-learning** promotion. E-didactics is an e-learning theory, which examines the education and teaching theoretical foundations of the e-environment (the general law, goals, methods, tools and results). It covers theories of learning issues, develops the planning basis of curriculum, teaching methods, organizational forms. E-didactics based in Dž.Djui constructivist ideas. So the e-didactics is a science – the branch of human activity, whose aim is to gain knowledge of e-learning (e-learning and e-teaching). Acquisition of knowledge is the way information flows, which constitute the so-called information pyramid (Figure 1).

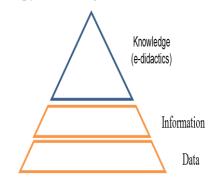


Figure 1. Information Pyramid in e-didactics (Lasmanis, 2011)

The Pyramid is based on data (they are empirically derived of pedagogical practice and in theory from various sources). Mid-pyramid (next level) is information (it is obtained from data processing with relevant research methods (E-pētniecība, 2011). On the top of the pyramid is the conclusion of knowledge (e-didactics). The information is gathered from the source data transfer process, on the result of using this information arises knowledge in certain circumstances. Systemic knowledge constitutes science. (Lasmanis, 2011).

Nowadays it is very important to use the e-study environment in the study process providing students with the available training materials, access to more resources. It is important that the learning process become more streamlined and more interesting for young people, more visible and with wider opportunities.

Study subject methodology (hereafter referred as "Methodology" in the text) is the branch of education science that studies the training patterns for a particular subject. The Methodology shall specify and apply training general principles, methods and teaching techniques for each study subject. It is very important needed to develop an effective teaching methods that suit the concrete subject-specific. Methodology Structure for Training Teachers of Home Economics and Technologies developed by author sees in Figure 3. (Dišlere, 2011).

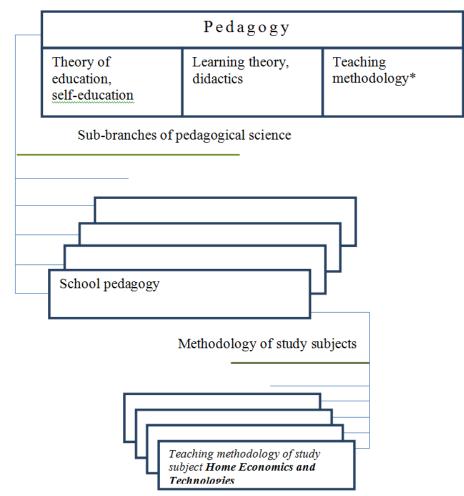
Subject of Methodology is one or another scientific or artistic basis of targeting organized cognitive process (learning process). Misconception is the belief that it is enough to be a good specialist in some science field for being good to teach others. There are three interrelated concepts in the study process: a study subject; teacher activities – teaching and student activities - learning.

Tasks of Methodology is to find regularities for link of teaching and learning within a concrete study subject area, which includes:

- to determine the place of concrete study subject in all education system;
- historical research of teaching concrete study subject;
- to set up content of concrete study subject; to work out teaching programs and teaching books and teaching aids;
- to choose teaching methods and organizing forms;
- to substantiate necessary teaching equipment according to the study subject;
- to work out criteria for estimation both of pupil's work and teacher's work.

Teaching Methodology' of study subject *Home Economics and Technologies* space in the pedagogy science and their sub-branches structure see in Figure 2. (Dislere, 2011). The main task of Methodology is to find effective methods for managing the study process, including analysis of daily

teaching and historical experience and generalization, analysis of school and other educational institutions' documentation. Methodology develops methods for how to use various technical teaching aids: photography, films, video, audio, multimedia, etc. equipments.



# Figure 2. Teaching methodology' of study subject *Home Economics and Technologies* space in the pedagogy science and their sub-branches structure

- \**Methodology* is a set of principles, methods and methodological techniques for targeted training and educational activities;
- *method* is a set of systematic methodological techniques for fulfilling the tasks of training and education;

*methodological technique* – is a way for specific solving the problem of training and education.

*Components of study subject* are: aim; tasks; content; methods; teaching aids; organization; results. The aim of training is knowledge. The aim of education is wisdom. The aim of education is a virtue. Training course is the path chosen to provide a curriculum for substance. It must be such as to enable the student to supplement their own knowledge after graduation without the teacher's assistance, it must always return to the student's self-learning. Teaching methods must be such as they combine a set of teaching techniques using which students reach their targets by the most direct way.

The content of study course worked out by author *Teaching Methodology' of study subject Home Economics and Technologies* covers the history of HE education; Topicality of HE; Teacher's of HE personality; The curriculum guidelines in HE and technologies form Ministry of Education; Teaching methods, planning and preparation the lessons for HE; the evaluation of student's learning results in HE, evaluation of HE textbooks; the technical resources of HE studies, the teaching aids, general safety rules in HE training workshops. *Learning outcomes* of the Methodology are the following. *Knowledge* acquisition and understanding of the theories of home economics (HE) and usage them in practice - learning regularities of HE and technology, of the subject of methodology and it's tasks, of

the challenges of learning components, of the general principles of methodology, of elements of teaching techniques, of history of HE education, about development trends of HE, of HE training workshop facilities provided. *Skills* to analyze and assess theories of methodology of HE and to choose the most appropriate for HE training process, the most appropriate teaching methods, textbooks, teaching classes, students study works of home economics. *Competence* - able to navigate the home economics and technology program development and assessment, able to draw up the thematic schedule, use of appropriate teaching methods, able to plan the lesson.

Developed *Methodology Structure for Training Teachers* of *Home Economics and Technologies* is the part of this study course and reflects the structure of the core elements of the methodology underlying the study process. Totally 24 students were involved in testing this study course which is placed in the e-study environment during study year 2010-2011 and during the practical work. 6 of them were part time students and 18 full time students. Full-time students were satisfied with the form of study using e-learning environment in addition to the classroom, and their success was much higher than part-time students. The group average evaluation mark for full-time students was 7.8 (in 10-point system), but the group average mark for part-time students was 6.5. By the authors opinion the situation should be upside-down, because e-studies is more foreseen for part time studies and it should be as important aid in the independent study process.

*Basic principles of Methodology* are the following: formulation of study aims and tasks; approachability of study tasks; to take into consideration steps of planning and organizing study work; to take into consideration general didactic principles; to take into consideration teaching strategy and strategy of choosing teaching aids; understanding of study matter; to make sense of understanding levels of pupil's.

*Pedagogical technique* is the set of knowledge, ability and skills which are needed for teacher to effectively put into practice the selected method both with individual students, with groups. Usability of pedagogical techniques is a key component of pedagogical mastership. (Pedagoģijas terminu skaidrojošā vārdnīca, 2000).

*Elements of pedagogical techniques* are teacher's skills to lead own and student's attention; sense of speed; control emotionality; culture of speech; psychological adaptation; exactingness; goodness; persuading skills; equitable evaluation skills; deference ect. HE and technologies teacher's pedagogical activities relate to development of youth physical, mental, moral and creative abilities. Teaching profession is characterized by the need for continuous improvement, enthusiasm and work of the creative nature, which is based on the art of forecasting of pedagogical communication and personal development. Special place in the education of HE and technologies teachers holds interest education, knowledge and skills in new technologies and the use of technical equipment, while maintaining the traditions and national culture.

To ensure the professional competence what is necessary for quality of work, Home Economics and Technology Teachers should manage the pedagogical techniques elements; to know the history of Home Economics Education, to be competent in Home Economics and Technology curricular and in training all themes: cooking, clothes processing, material handling, including textile, composition, woodworking and metalworking, electrical equipment and motor vehicle service, technical drawing; consumer science, housing, food, clothing, security, family finances, advertising, shopping, arts, the correct relationship between family members; to be familiar with modern household equipment and technology; to be able to arrange training workshops and organize training standards appropriate safe work. (Dišlere, 2011, 33-43).

Educators' central problem is to choose the right of the large amount of available material. As a result of knowledge explosion occurred in many areas the teacher should be able to choose the appropriate material. Teacher is not allowed to choose the material to good fortune. Educator should seriously evaluate learning material quality and relevance of a particular student age and the modern era. Practical guidance is related to the direct relevance of the material expedience. Training efforts are devoted to be estimated! 75% of time devoted HE and technologies lessons should be given to practical work.

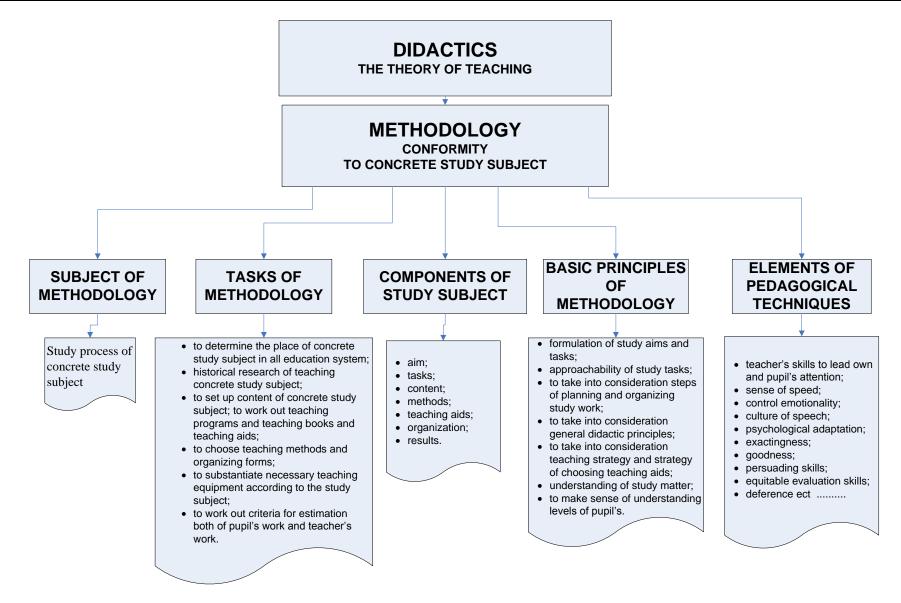


Figure 3. Methodology Structure for Training Teachers of Home Economics and Technologies

Mainspring of the learning process is the contradiction between the requirements of society, as it puts forward a new generation required for the training and the level of training, what is achieved in the study process. Sometimes it is observed that the actual level of students' acquiring study content is not in compliance to the level of result to be achieved. At an early stage of learning mainspring of the student's need is to satisfy their cognitive needs and inability to do it alone. The main prerequisite for teaching activities through which the student can activate the internal momentum and develop the student's intellectual forces is to determination of the degree of difficulty and hardship. (Albrehta, 2001).

Working as HE and technologies teacher in school, educators should realize and implement all components of the learning process respecting the basic principles of the methodology, using of all pedagogical techniques and to indicate the links with other study subjects for students understanding.

Home Economics content draws from multiple disciplines, synthesising these through interdisciplinary and transdisciplinary inquiry. This coalescing of disciplinary knowledge is essential because the phenomena and challenges of everyday life are not typically one-dimensional. The content (disciplinary bases) from which studies of Home Economics draw is dependent upon the context, but might include: food, nutrition and health; textiles and clothing; shelter and housing; consumerism and consumer science; household management; design and technology; food science and hospitality; human development and family studies; education and community services and much more (IFHE, 2011).

A review of the roots of transdisciplinary (TD) methodology in home economics will be followed by an explanation of methodology (especial empirical, interpretive, and critical). The profession's readiness to embrace the TD approach is very important. All members of the profession have an abiding obligation to generate new knowledge to enhance family well-being and quality of life; TD methodology is the most recent innovation for that task. When a tipping point is achieved within the profession, the TD methodology can spread widely and profoundly. (McGregor, 2011).

Home Economics can be clarified by four dimensions or areas of practice:

- as an *academic discipline* to educate new scholars, to conduct research and to create new knowledge and ways of thinking for professionals and for society;
- as an arena for everyday living in households, families and communities for developing human growth potential and human necessities or basic needs to be met;
- as a curriculum area that facilitates students to discover and further develop their own resources and capabilities to be used in their personal life, by directing their professional decisions and actions or preparing them for life;
- as a *societal arena to influence and develop policy* to advocate for individuals, families and communities to achieve empowerment and well-being, to utilize transformative practices, and to facilitate sustainable futures. (IFHE, 2011).

Critical science is the process used to examine a situation and develop strategies for improvement. This concept is evident in the mission statement for home economics. Today, HE professionals use critical science to improve practice in a variety of ways. Critical science is used to think beyond the immediate effects of a solution to question underlying beliefs, values, and assumptions. Engaging in intellectual discussions on various topics is valuable to recognize another point of view or unintended consequences, develop logical reasoning skills, and improve presentation skills. The following purpose statement still shows elements of critical science and ecosystems theory, "an integrative approach to the relationships among individuals, families, and communities and the environments in which they function" (Vincenti, Smith, 2004).

# Conclusions

• Home economics provides learning contexts in selecting, preparing, cooking and serving food to ensure the empowerment of individuals and families to make informed choices in their lives in the most basic of ways. Home economics teaches the importance of critical and reflective

thinking about social issues towards enabling optimum health, focusing on how students can be empowered both individually and collectively.

- The education establishments should encouraged students' interest to learn through studentcentered approach in education, there should be wider use the information technologies in training several study subjects by organizing virtual environment. Also practical tasks should be integrated into students' education and regular practice should be organized in the labor market in close cooperation with employers.
- Author's developed *Methodology Structure for Training Teachers* of *Home Economics and Technologies* is the part of established study course *Teaching methodology of Home Economics* which is accepted in e-studies environment as complementary aid for training teachers of Home economics and technologies. Students attitude were very positive and full-time students were more satisfied than part time students using it.
- Methodology is the theory that implements the proper selection of training material; effective teaching organization (methods, teaching aids, teacher's personality); to choose the most appropriate content (curriculum) taking into account learning objectives; students' knowledge and skills and for what purposes acquired material will be used.
- To be successful in four dimensions of practice (academic discipline, everyday living, curricula and development policy) means that the profession is constantly evolving, and there will always be new ways of performing the HE profession. This is an important characteristic of the profession, linking with the twenty-first century requirement for all people to be "expert novices", that is, good at learning new things, given that society is constantly and rapidly changing with new and emergent issues and challenges.

# References

- 1. Albrehta Dz. (2001). Didaktika. (Didactics), Raka, Rīga, Latvija. p. 32-36. (In Latvian)
- Dišlere V. (2011). Mājturības mācību metodika (Teaching methodology of Home Economics). Mācību materiāli LLU studiju programmās: Mājas vide un informātika izglītībā un Mājas vide un vizuālā māksla izglītībā (Training materials for LLU study programs: Home Environment and Informatics in Education and Home Environments and Visual Arts in Education), LLU, Latvijas Praktisko mācību priekšmetu metodiskā apvienība, Jelgava, Latvija, pp. 8-13. (In Latvian)
- 3. E-pētniecība. (e-research). [online] [01.12.2011]. Available at http://www.alnet.lu.lv/e-petnieciba/ (In Latvian)
- 4. Fraser W. J. (2000). Didactics and pedagogy. Technology: access, pedagogy and use in ODL research. The Open University of Hong Kong [online] [01.12.2011]. Available at <a href="http://www.ouhk.edu.hk/cridal/cridala/wrapup/discuss/messages/137.html">http://www.ouhk.edu.hk/cridal/cridala/wrapup/discuss/messages/137.html</a>
- McGregor S. L. T. (2011). Knowledge Generation in Home Economics Using Transdisciplinary Methodology, Kappa Omicron Nu Forum. [online] [01.12.2011]. Available at <u>http://www.kon.org/archives/forum/16-2/mcgregor2.html</u>
- 6. IFHE. (2004). *Position paper on the 10<sup>th</sup> Anniversary of the International Year of the Family (1994–2004)*. Retrieved May 2006, [online] [01.12.2011]. Available at http://www.ifhe.org/136.html
- IFHE. (2011). Position statements un millennium development goals 2011. International federation of home Economics. [online] [01.12.2011]. Available at http://ifhe-us.org/mdg2011.pdf
- 8. Lasmanis A. (2011). E-didaktika. (E-Didactics). [online] [29.09.2011]. Available at <u>http://www.alnet.lu.lv/e-didaktika/</u> (In Latvian)
- Pedagoģijas terminu skaidrojošā vārdnīca. (2000). (Glossary of Pedagogical Terms) I. Beļickis, D. Blūma, T. Koķe u.c. Zvaigzne ABC, Rīga, Latvija, pp. 248. (In Latvian)
- Pendergast D. (2006). Sustaining the home economics profession in new times. Presentation to University of Aberdeen, Home Economics Conference, Dundee, May 2006.
- 11. Vincenti, V., & Smith, F. (2004). Critical science: What it could offer all family and consumer sciences professionals. *Journal of Family and Consumer and Applied Sciences*, *96*(1), 63–70.

# THE STRATEGY OF SUSTAINABLE NUTRITION OF PRESCHOOL AGE CHILDREN

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**Abstract:** Nutrition is a major environmental influence in physical and mental growth and development in early life. The Pre-school time is the only age, when children are not deciding themselves what to eat. Hence, in the proper diet of preschool children is concerned the whole society.

The aim of this paper is to identify the stakeholders and analyze their importance and engagement in provision of sustainable catering service and nutrition education in preschool educational institutions.

The research is based on the public health nutrition (PHN) practice bi-cycle, which is including community analysis and engagement, problem analysis and stakeholder analyses. The main focus of this paper is on stakeholder analysis, which is centered on results of two interviews conducted in May of 2011 - quantitative questionnaire of parents of kindergarten and qualitative face-to-face interview with the head of the kindergarten.

In Latvia in provision of healthy nutrition are involved all levels of management - both arranged legislation and developed the recommended dietary norms and provided three times catering in kindergartens under the supervision of medical staff.

Keywords: preschool children, stakeholders, sustainable nutrition.

### Introduction

Nutrition – what people eat – is known to be one of the key factors influencing health. If people eat healthily, they can avoid many preventable diseases and can live longer lives more free of illness. Many European countries have attempted to introduce campaigns for healthier eating, and concern is widespread about the move towards a fast-food culture in which traditional styles of eating and cooking are declining. (Dixey et.al., 1999).

Many authors are emphasizing the importance of preschool age for healthy future development of a personality.

Children's food preferences and practices are initiated early in life (e.g., 2–5 years of age), early dietary intervention programs may have immediate nutritional benefit, as well as reduce chronic disease risk when learned healthful habits and preferences are carried into adulthood. Families and child-care settings are important social environments within which food-related behaviors among young children are developed. (Niclas et. al., 2001)

Research evidence suggests that children are not born with the innate ability to choose a nutritious diet; instead, their food habits are learned through experience and education. (Swadener, 1994)

The years between a child's 2nd and 5th birthdays represent a period of rapid social, intellectual and emotional growth. At the same time, overall physical growth is decelerating while motor skills are being fine-tuned. Preschoolers are busy exploring the environment. They have tested their independence and are now ready to learn. Food preferences can now be influenced; parents and friends as well as television advertising will affect food consumed. (Sigman-Grant, 1992)

Nutrition education is essential for preschool children because the quality of their nutrition has a direct impact on their growth and development as well as their nutritional status throughout life. The early years in a childs life are critical ones to the formation of health promoting nutritional concepts and behavior. (Swadener, 1994)

With the future in mind, the alarming trends in obesity create a need for immediate action – especially with regard to children: more than 30% of all European children are overweight or obese (European Commission, 2007)

The study of Public Health Agency shows that in Latvia 21.5% of seven-year-old children (24.5% boys and 18.4% girls) are overweight, including obesity. In general, obesity is the problem of 8.2% of the first class students. The highest proportion of obese children is in Riga and other big cities. (SVA, 2008)

What has become clear is that the prevention of obesity needs the concerted action of all actors involved, including children and parents, the food industry, retailers, the media and marketers. As far as children are concerned, the major responsibility for obesity lies with their parents and families as well as with secondary socialization agents such as caretakers and teachers. All mentioned agents act as gatekeepers. This means that they have, to a larger or lesser degree, the power to control the impact the media, retailers, the food industry, restaurants and food marketers exercise on children's food preferences and physical activities. (Reisch; Gwozdz, 2010)

Within the framework of international mobility project (http://www.nutgecs.eu/) in five countries (Turkey, Latvia, Germany, Romania and Austria) is explored the catering for preschool children.

In all countries the analysis of the national nutrition policy, participation analysis of local municipality (community) and problem analysis are done, as well as identified the stakeholders and their obligations and carried out the qualitative interviews.

This article describes findings from interviews with key stakeholders in Latvia conducted in May 2011.

The **aim** of this paper is to identify the stakeholders and analyze their importance and engagement in provision of sustainable catering service and nutrition education in preschool educational institutions.

The following **hypothesis** is stated: the government with effective use of policy instruments is able to come to strategy of sustainable nutrition of preschool children.

To attain the aim the following **objectives** are identified as relevant:

- 1. to describe the problematic of nutritional concerns of preschool age children;
- 2. to identify the stakeholders relevant to nutrition issues and problems of preschool age children;
- 3. to apply stakeholder analysis techniques to understand the needs, agendas and engagement of stakeholders;

To analyze the situation in Latvia a special focus is given to kindergartens in Jelgava city.

#### Materials and methods

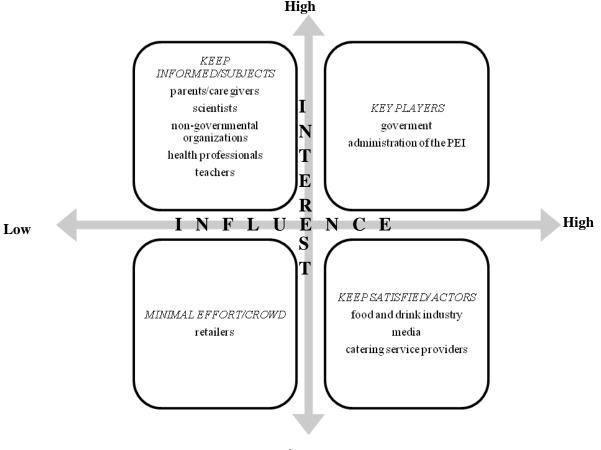
The research is based on the public health nutrition (PHN) practice bi-cycle, which is including community analysis and engagement, problem analysis and stakeholder analyses. The main focus of this paper is on stakeholder analysis, which is centered on results of two interviews – quantitative questionnaire of parents of kindergarten and qualitative face-to-face interview using checklist with the head of the kindergarten "Pasaciņa". Quantitative questionnaire was conducted in 20 kindergartens of Latvia, mainly in Jelgava city with participation of 131 parents. The data has been processed with SPSS program. Descriptive statistics was used to describe the basic features of the data in a study.

Monographic descriptive method, as well as the methods of analysis, synthesis and logical construction are used to study the problem elements.

# **Results and discussion**

One of the important questions that needs to be asked when considering how to and who will assist to develop solutions to address the identified public health nutrition (PHN) issue is 'who are the main stakeholders involved in this issue'? There is increasing recognition of the central role of stakeholders – individuals, groups and organisations – who have an interest (or stake) and the potential to influence the actions and aims of a project or policy direction (Brugha, 2000).

By collecting and analysing data about the stakeholders, an insight can be gained, who will be affected or who are concerned about the nutrition issue of preschool age children, as well as their level of *interest* and *influence* on developing solutions for the issue.



Low

# Figure1. Stakeholder analyses grid – preschool children nutrition in Latvia

This stakeholder analysis is based also on Tim Lobstein's article about childhood obesity and previous study about "Soft drinks and obesity in Latvia" by Knai et al.

# Interested stakeholders with high influence

According to our analysis the most influential and interested stakeholders are among administration of PEI and government/ local municipality, however the latter could show stronger position in restriction of using food with low nutritional value in catering of preschool age children. It could be correct to say, the interest is more visible in different kind of advisory documents and public relations, but less in strict legislation and regulations. If parents would be united in some association, they could become also more powerful.

#### Interested stakeholders with medium/low influence

Interested stakeholders with medium to low influence included non-governmental organizations (NGO) or civil society groups; nutrition specialists involved in raising the issue of obesity and healthy diet in the media; public health researchers in university settings and parents of preschool children. All of them could become more influential if the interest about healthy nutrition would go beyond the local and micro environment. In Latvia it is expected to have stronger voice from NGOs, unfortunately they supposed to be interested, but there is least done from the side of NGOs.

Conversely, those with the greatest interest in improving children's diets appear to have the least influence on policy.

# Low interest stakeholders with high influence

Food and drink industry, media and catering service providers are the ones, whose main interest is profit, therefore with different motivation at the end they are not very interested in provision of healthier choices, which can sometimes lead to higher price and additional costs (for instance sausage is cheaper than fresh meat). Since they are very close to the direct consumers, their influence is considered as high.

# Low interest with low influence

This is the group, which is putting minimal effort in making the change for healthier nutrition of children, but in the same time has very important place in the food supply chain. In this study the retail sector is appointed. As the business sector they are mainly interested to sell well known, widely consumed and advertised products, which are not always the healthy ones.

All of the stakeholders may change their location in the graph, if there is a proper and positive stimulation. The results of this analysis agrees with Tim Lobstein that in order to influence policy, and to restructure the graph in favour of healthier children, it might be valuable to look at trying to move the various components on the graph—for example by strengthening the influence of those who are currently in the top left corner of the graph and encouraging them to be noticed and their views considered. Equally it could be valuable to reduce the influence or alter the relatively negative influence of those who are currently in the lower right hand part of the graph, by finding incentives for them to change their interests so that they support healthier diets. Finally, those with the most influence on policy (suggested in this graph as being government, administration of PEI) need to become more interested in the promotion of healthier diets—through showing the economic damage that obesity and other health problems because of wrong nutrition in early childhood may cause and by increasing the political pressure for action. (Lobstein, 2005)

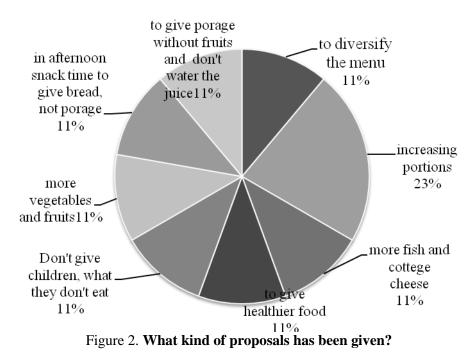
The nutrition specialist of preschool age children from Latvia University of Agriculture Valda Kozule is recognizing today's problems of catering in preschool educational institutions:

Municipalities are concluding the contracts with catering companies not for food quality, but only for the lowest price, which the firms are usually setting unreasonably low just to win the contest and it has consequences:

- In order to earn (PEI and the schools do not provide a good profit) are purchased the products with lowest price, which often are also less valuable and unsuitable for children's nutrition;
- Menus do not provide adequate nutrition value and the amount of food (for sense of fullness), children frequently feel hungry, the health problems start;
- Meals are subordinated according to the needs of workers (eg, afternoon snack 15.00, or even faster, for canteen staff to finish the work faster, but the children just have eaten lunch from 12:00 to 13:00).

The results of quantitative interview "Parents' opinion about quality and organization of the catering in the kindergarten" are showing, that:

- 1. 95% of parents are thinking that food in kindergartens is healthy
- 2. 68% of parents on a regualar basis are fallowing up the menu of kindergarten
- 3. Only 8% of parents have ever approached with advices about food service improvements
- 4. The proposals given about improvement of children's nutrition are as fallows (see Fig.2) The proposals given by parents are related with the problems mentioned above. And the low activity of parents could be explained with their different levels of knowledge about healthy food as well as low confidence about their ability to influence the established system. From first two answers we can estimate that almost 30% of parents are not interested, what is the content of daily nutrition of their children.



5. According to parents' opinion the fallowing food could be included in daily menu (See Fig.3) The results are showing that in daily menus of kindergartens there is really lack of so important nutrients as vegetables and fruits, which are the main components of healthy diet. 9% of respondents would like to see in the menus such traditional fast food (with low nutritional value) as dumplings, what is clearly showing wrong perception of healthy food and the consumption patterns of the family.

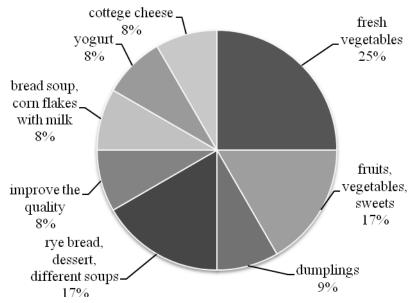


Figure 3. What kind of food should be included in daily menu?

6. According to the parents' opinion the most frequent healthy meals in menus of kindergarten are as fallowing in Figure 4.

In average in kindergartens the food is considered as healthy – freshly cooked and warm, controlled by different kind of institutions. Many international studies did came to conclusions, that the main nutrition problems of preschool children are coming from their families, where because of both working parents and the lack of time are developed unhealthy consumption patterns.

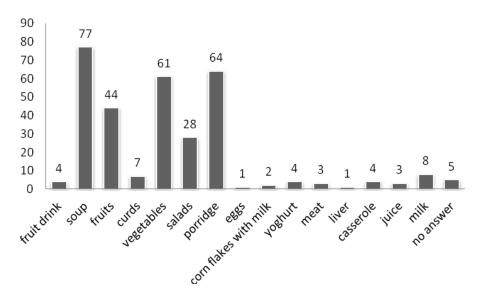


Figure 4. Most frequent healthy meals in menus of kindergarten

The face to face interview results with the head of PEI "Pasaciņa" regarding catering service and nutrition education of children are very positive and seeming not to have any of the mentioned problems of nutrition specialist. The interview shows that the head of PEI is interested in quality of supplied meals, but at the end the final decision is up to the enterprise. If there are no complaints regarding food quality, the administration is not evaluating and fallowing the menu. The work is based on mutual trust even there is no nutrition specialist involved in catering process of children.

Table 1

Analysis of interview	v results –	catering	service
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Positive aspect	Negative aspect	
Quality meal =>	It is hard to discuss on a complete menu, as	
$\Rightarrow$ Comments of parents	calculations related to it is done by the enterprise.	
$\Rightarrow$ Comments of staff		
It is daily evaluated by medical staff	The institution's head believes there is no need to	
	increase the staff by establishing a position of	
	nutrition specialist	
Three meals are provided	Seasonal food products do not dominate	
No payment problems caused by parents	Constant supply of meals	

Analysis of the interview result – nutrition education of children aged 3-4 years

- The kindergarten is not involved in projects regarding nutrition
- The COUNCIL of PARENTS in which 3-4 parents from each group of children actively participate. Various meetings with specialists concerning food additives, energy value of food products and healthy food are held.
- Nutrition education of children is performed:
  - according the preschool educational program's practical classes table culture,
    - preparation of simple dishes related to annual celebrations
  - in daily discussions on healthy food between pedagogues and children.

Consumption of a healthy diet by young children is essential to provide for normal growth and development and to prevent a variety of nutrition-related health problems, such as anemia, growth retardation, malnutrition, compromised cognitive achievement, obesity, dental caries, and chronic diseases in later life. Children are the nation's most important resource and thus deserve the best possible education for their present and future health.' (Swadener, 1994)

#### Conclusions

The system of kindergarten catering service in Latvia is a well-developed and is governed by legislation and supervised by the control authorities.

Children's education is regulated by preschool educational program, but the main work on nutrition education depends on the teachers how to organize lessons on healthy eating.

Teachers are considered as interested stakeholders in healthy nutrition of their children, but in the same time resistant to change or difficult to engage because of too much other duties and low payment, therefore the significance of nutrition in kindergarten must be implemented in curricula for teachers.

Health professionals, scientists and NGO's are not enough raising the awareness of society about present emerging health problems of children and the importance of healthy and sustainable nutrition in early childhood. Therefore there is also less pressure on policy makers for necessity to draw up and implement an action plan for healthy nutrition based on current scientifically recognized health promoting principles and approved nutritional norms.

The result of survey is showing that among parents there are different opinions about healthy food. The caregivers should be a part of nutrition education provided by government.

All who are educating, organizing and financing the nutrition of preschool age children are jointly responsible for its sustainability.

# References

- 1. Brugha R, Varvasovskyz Z. (2000). Stakeholder analysis: A review. Health Policy and Planning, Vol. 15, p. 239-246.
- Dixey R., Heindl I., Loureiro I., Pérez-Rodrigo C., Snel J., Warnking P. (1999). Healthy eating for young people in Europe. A school-based nutrition education guide. International Planning Committee (IPC), p. 5-13.
- 3. European Commission. White paper on a strategy for Europe on nutrition, overweight and obesity related health issues. [online] [06.11.2011]. Available at http://ec.europa.eu/health/ph\_determinants/life\_style/nutrition/documents/nutrition\_wp\_en.pdf
- 4. Knai C., McKee M., Pudule I. (2010) Soft drinks and obesity in Latvia: a stakeholder analysis. European Journal of Public Health, p. 1-5.
- 5. Lobstein T. (2005). Can we prevent childhood obesity? SCN News; Vol. 29, p. 33-38.
- Nicklas A. T., Baranowski T., Janice C., Cullen K., Rittenberry L., Olvera N., (2001) Family and Child-care Provider Influences on Preschool Children's Fruit, Juice, and Vegetable Consumption, Nutrition Reviews, Vol. 59, Issue 7, p. 224–235.
- 7. Reisch L.A., Gwozdz W. (2010). Chubby cheeks and climate change: childhood obesity as a sustainable development issue, International Journal of Consumer Studies, Vol. 35, p.3-9.
- 8. Sabiedrības Veselības Aģentūra (Public Health Agency) (2008). Bērnu antropometrisko parametru un skolu vides pētījums Latvijā. (Research about children's anthropometric characteristics and school environment in Latvia). SVA, Rīga, p. 5-8. (In Latvian)
- 9. Sigman-Grant M. (1992). Feeding preschoolers: balancing nutritional and developmental 1. needs, Nutrition Today, Vol.27, p.13-17.
- Swadener S.S. (1994). Nutrition Education for Preschool Age Children: A Review of Research. U.S. Department of Agriculture Food and Consumer Service, Alexandria, VA., p.4-10.

## IMPORTANCE OF MEALS AT SCHOOL FOR THE ADOLESCENTS' WAY OF NUTRITION

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**Abstract:** In recent years increased the consumption of unhealthy foods among adolescents, especially sweets, sweetened soft drinks and fast food meals. This food is also widely available at school, as an offer of school shops and cafeterias. Aim of the study is to analyze the selected adolescents' dietary behaviours, including number of meals and snacking, with reference to food eaten at school. Questionnaire survey was carried out in 2009 within 185 students of secondary schools in Świętokrzyskie voivodship, Poland. There were observed some dietary errors in the nutrition way of young people, as evidenced by irregular eating and eating high-energy food. Availability of foods in school shops and cafeterias significantly favored the incorrect diet of schoolchildren. There is a need to improve the food supply available at school taking into account the rules of proper eating. It will results in better nutritional status of young people and their better achievements in the learning process.

Keywords: nutritional behaviours, way of nutrition, adolescents, meals at school.

## Introduction

Adolescents are a vulnerable population in terms of unfavorable nutritional intake. Simultaneously there are observed some unhealthy behaviors among school children, for example irregularity of eating meals (Ilow et al., 2008; Jeżewska-Zychowicz, 2007; Wierzbicka & Roszkowski, 2005), skipped meals, especially the breakfasts and lunches (Dzielska et al., 2008; Gould et al., 2006; Rempersaud et al., 2005); snacking between meals (Ilow et al., 2008; Jeżewska-Zychowicz, 2007) and the excessive consumption of highly processed foods and fast foods (Wierzbicka & Stosio, 2007; Wierzbicka & Roszkowski, 2005). In recent years increased the consumption of unhealthy foods, especially sweets, sweetened soft drinks and fast food meals, which are also widely available at school in shops and cafeterias. Availability of snacks at school has been associated with unhealthier food habits (Wouters et al., 2010).

According to the recommendations adolescents should eat at least 4-5 meals a day in order to provide all nutrients (Wajszczyk et al., 2008). Intervals between meals should not be longer than 4 hours, which means that during the school day, which last up to 10 hours, students should be able to eat one or two meals. Too long breaks between meals affect negatively the body functioning, concentration, mood, which in turn limit the student's active participation in school activities (Ziemlański, 1998).

During adolescence, children spend increasingly more time with friends, and their need to be accepted by peers is higher than earlier or even later in their life. Peers may influence each other by observing, modeling, and imitating behavior of important individuals in their environment. The increasing importance of peers plays important role, especially when the person is outside home, i.e. at school (Contento et al., 2006; Story et al., 2002).

Snacking between meals, but also replacing main meals by snacking is observed among young people quite often. Nevertheless, snacking may be seen as beneficial if the recommended products are consumed, such as fruits, vegetables, yogurts, milk drinks, cereals (Wajszczyk et al., 2008). The studies carried out so far demonstrated, however, that among snacking products primarily sweets were indicated (Jeżewska-Zychowicz, 2005; Komosińska et al., 2001).

Aim of the study is to analyze the selected adolescents' dietary behaviours, including number of meals and snacking, with reference to food eaten at school. The results of the analyses will be used to assess the impact of these behaviours on the healthiness of food habits among adolescents.

## Materials and methods

Questionnaire survey was carried out in 2009 within 185 students of secondary schools in Świętokrzyskie voivodship, Poland. Respondents represented a high school (54 persons), technical (86 persons) and vocational school (45 persons). They were at the age of 16 - 19 years (93 girls and 92 boys) and they lived in the urban (77 people) and rural environment (107 persons). The amount of meals, regularity of eating, snacking between meals, kinds of eaten food, and frequency of buying food at school were questioned.

In the analysis for the description of the population structure and particular variables the frequency analysis was used as well as cross tables, the data were compared with the help of Chi<sup>2</sup> test. The probability 0.05 was accepted as the significance level. Statistical package SPSS for Windows PL.14 was used for performing the analyses.

## **Results and discussions**

More than half of respondents (54.5%) consumed 4 - 5 meals a day. There were no significant differences between boys and girls. About 1/3 of respondents ate three or less meals per day. Similarly like in the studies of Szczepaniak et al. (2002), more girls (37.6%) than boys (30.4%) consumed 3 meals per day. Differences also occurred in the case of consuming more than 5 meals a day, while more boys than girls reported eating 5 meals a day (table 1). Obtained results in this study were similar to those performed by other authors (Wajszczyk et al., 2008; Jeżewska-Zychowicz, 2002).

Snacking was declared by majority of the students, however, most respondents reported a frequency of snacking described as "sometimes". There were no statistically significant differences in the declarations of males and females (Table 1), which is confirmed in some other studies (Wajszczyk et al., 2008; Wierzbicka & Roszkowski, 2005).

Table 1

eaten a day and snacking between means (76)			
Total (N =185)	<b>Female</b> ( <b>N</b> = 93)	Male (N = 92)	
ay (NS)			
8.6	7.5	9.8	
25.4	30.1	20.6	
36.2	38.7	33.7	
18.3	17.2	19.6	
11.3	6.4	16.3	
Frequency of snacking between meals (NS)			
8.2	9.8	6.6	
56.3	56.5	56.0	
35.5	33.7	37.4	
	Total (N =185)           ay (NS)           8.6           25.4           36.2           18.3           11.3           etween meals (NS)           8.2           56.3	Total (N =185)Female (N = 93)ay (NS) $8.6$ $25.4$ $36.2$ $36.2$ $18.3$ $17.2$ $11.3$ $6.4$ etween meals (NS) $8.2$ $9.8$ $56.3$ $56.5$	

Structure of the population according to the number of meals eaten a day and snacking between meals (%)

NS – there were no statistically significant differences between variables at level of significance p<0.05

The most regularly eaten meal was dinner, with significantly more boys than girls consumed this meal. A similar relationship was found for everyday eating supper, the meal that, in comparison with dinner, was consumed everyday by less students. Daily consumption of breakfast and lunch declared only slightly more than half of the respondents. Despite the lack of statically significant differences, there was observed slightly higher proportion of girls consuming lunch, and a higher percentage of boys eating his breakfast every day (Table 2).

The results confirmed the high stability of the phenomenon of irregular meals eaten by adolescents (Frączek, 2003; Wierzbicka & Roszkowski, 2005). Skipping breakfast before going school affects negatively cognitive processes, which may result in poorer academic performance (Chitra & Reddy, 2007).

Table 2

Regularity of eating		Breakfast (NS)	Lunch (NS)	Dinner (IS)	Supper (IS)
Everyday	T*	52.4	56.2	73.5	67.6
	F	50.5	61.3	64.5	58.1
	Μ	54.3	51.1	82.6	77.2
One or twice a week not	Т	9.2	18.9	11.9	13.5
eaten	F	9.7	16.1	16.0	15.1
	Μ	8.7	21.7	8.7	12.0
Three or four times a week	Т	14.6	9.7	9.7	9.2
not eaten	F	14.0	11.8	14.0	11.8
	Μ	15.2	7.6	5.4	6.5
Five or more times a week	Т	23.8	15.1	4.9	9.7
not eaten	F	25.8	10.7	6.5	15.1
	Μ	21.7	19.6	3.3	4.3

The structure of population according to the regularity of meals per week (%)

\*T – Total population; F – Females, M – Males

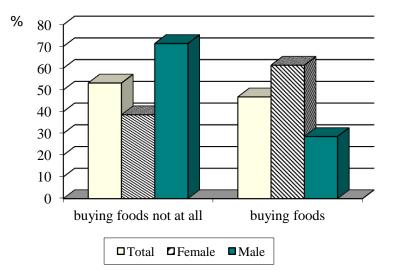
NS – there were no statistically significant differences between variables at level of significance  $p{<}0.05$ 

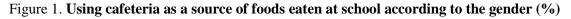
IS – there were statistically significant differences between variables at level of significance  $p\!<\!\!0.05$ 

About 1/4 of respondents indicated that they almost never ate breakfast (five or more times a week they did not eat it). Lunch was almost not eaten by 15% of population. There were significant differences between girls and boys taking into account the regularity of eating supper. Almost four times more females than males reported that five or more times a week they did not eat supper, and 2-fold more girls than boys indicated that three or four times a week they did not eat this meal (Table 2).

Over 90% of population consumed meals at home, except for lunch, which was consumed mainly at school. Foods consumed at school was brought from home (78.4% of respondents) and / or was bought at school. Nearly 30% of respondents bought food consumed for lunch in cafeteria, and 24.3% of pupils bought it in the school shops.

Buying foods in cafeteria or school shop was significantly different in the group of females and males. The use of the cafeteria, when being at school, reported significantly more girls (61.4%) than boys (28.6%), while in the case of school shops, significantly more boys (89.1%) than girls (75.3%) used them as a source of foods eaten at school (Fig. 1 and Fig. 2).





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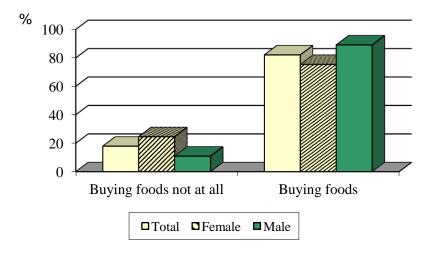


Figure 2. Using school shops as a source of foods eaten at school according to the gender (%)

In the opinion of over 2/3 of population there were opportunity to buy in their schools beverages, chips, candies, doughnuts, sandwiches and other snacks (crackers, nuts), soups like "hot cup", casseroles and pizzas. However, they could buy also dairy products (16.1%) and fruits (35.1%) (Fig. 3).

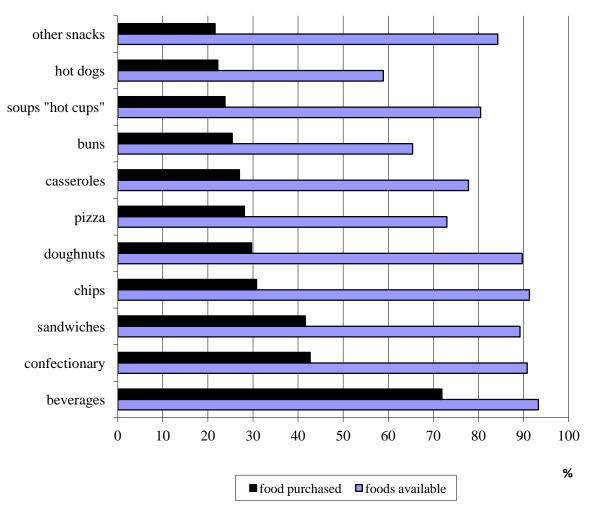


Figure 3. Opinions on foods available at school and purchase of foods and beverages declared by students (%)

The interest in the food offer available at school were lower than food supply, and it differed among students. More than 2/3 of respondents bought beverages, over 1/3 of respondents bought confectionery and sandwiches, while more than 1/4 of them purchased chips, doughnuts, pizza, casseroles and buns (Fig. 3). Foods availability at school was bigger than the readiness to buy them by students. One important reason of that seemed to be the limited amount of money having by students (Jeżewska-Zychowicz, 2007).

Table 4

Purchase of foods declared	l by students according	to the gender (%)
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Foods	Total	Female	Male
Beverages (IS)	71.9	80.6	63.0
Confectionary (IS)	42.7	52.7	32.6
Sandwiches	41.6	48.4	34.8
Chips	30.8	28.0	33.7
Doughnuts	29.7	24.7	34.8
Pizza	28.1	23.7	22.6
Casseroles (IS)	27.0	20.4	33.7
Buns	25.4	25.8	25.0
Soup "hot cup"	23.8	21.5	26.1
Hot dogs	22.2	21.5	22.8
Other snacks	21.6	23.7	19.6

#### IS - there were statistically significant differences between variables at level of significance p<0.05

Adolescents' snacking behaviours is not only expected to depend on aspects of physical and social environment, but also on personal characteristics (Kremers et al., 2006), for example gender (Bauer et al., 2009; Jeżewska-Zychowicz, 2007). Significantly more females than males reported the purchase of beverages and sweets, while more boys reported about buying casseroles, and hamburgers. These findings may surprised because female gender is associated with healthier choices, both in adults (Wardle et al., 2004) and in children (Hill et al., 2008). In the case of other foods purchased at school, there were no statistically significant differences according to the gender (Table 4).

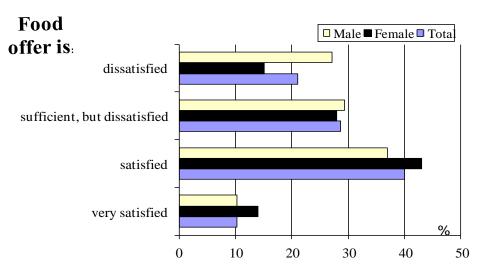


Figure 4. Students' opinions on the foods available in the school (%)

Approximately half of the respondents declared that they were satisfied with the offer of food available in the school. The other rated it as unsatisfactory, although almost 29% of the people despite the discontent, said that the offer is sufficient. High satisfaction with food supply at school may result in small effects of its change. It could be expected that the change in supply of foods available at

school may modify the purchase habits, but it should be essential modification relying on reducing availability of unhealthy food and increasing the variety of products recommended by nutritionists.

Gender did not differentiate in the statistically significant way the opinions, but almost twice as many boys than girls were dissatisfied with the opportunity to purchase food during the stay in school (Fig. 4).

More than four fifths of respondents (85.4%) as a reason to buy food at the school identified the hunger and the needs of its satisfaction, and 18.9% of students said that they liked to snack on. Other reasons were cited by a small percentage of respondents, namely: no wonder why I'm doing this (6.5%), I buy and eat because my friends from school do the same (2.2%). Although only small percentage of respondents indicated friends behaviours as model, it is known that children at this age spend increasingly more time with friends, and their need to belong to a group and to be accepted by peers is higher than during other periods in life (Wouters et al., 2010).

## Conclusion

Based on analysis of empirical materials can be stated that:

- There were some dietary errors in the nutrition way of young people, as evidenced by irregular eating and eating high-energy food.
- Availability of foods in school shops and cafeterias significantly favored the incorrect diet of schoolchildren.
- There is a need to improve the food supply available at school taking into account the rules of proper eating. It will results in better nutritional status of young people and their better achievements in the learning process.

## References

- 1. Bauer K., Larson N.I., Nelson M.C., Neumark-Sztainer D. (2009). Socioenvironmental, personal and behavioural predictors of fast-food intake among adolescents. *Public Health Nutrition*, 12, p.1767-1774.
- 2. Chitra U., Reddy C.R. (2007). The role o breakfast in nutrient intake of urban schoolchildren. *Public Health Nutrition*, 10(1), p.55-58.
- 3. Contento I.R., Williams S.S., Michela J.L. et al. (2006). Understanding the food choice process of adolescents in the context of family and friends. *Journal of Adolescent Health*, 38, p.575-582.
- Dzielska A, Kołoło H, Mazur J. (2008). Zachowania zdrowotne młodzieży związane z odżywianiem w kontekście czynników społeczno-ekonomicznych – kierunek zmian w latach 2002-2006 (Young people's healthy habits related to nutrition in relation to socio-economic factors). *Problemy Higieny i Epidemiologii* (Problems of Hygiene and Epidemiology), 89(2), p.222-229. (In Polish)
- 5. Frączek B. (2003). Charakterystyka sposobu odżywienia młodzieży klas maturalnych liceum ogólnokształcącego. (Young people's diets in secondary school). Żywienie Człowieka i *Metabolizm*, 30, p.86-92. (In Polish)
- 6. Gould R., Russell J., Barker M.E. (2006). School lunch menus and 11 to 12 years old children's food choice in three secondary school in England are the nutritional standards being met? *Appetite*, 46(1), p.86-92.
- 7. Hill C., Llewellyn C.H., Saxton J., Webber L., Semmler C., Carnell S. (2008). Adiposity and "eating in the absence of hunger" in children. *International Journal of Obesity*, 32, 1499-1505.
- Ilow R., Rogulska-Ilow B., Sarzała-Kruk D., Biernat J. (2008). Ocena zwyczajów żywieniowych licealistów z Oleśnicy (Assessment of the dietary habits of the secondary school students in Oleśnica). *Bromatologia i Chemia Toksykologiczna* (Toxicological Chemistry and Bromatologia), 3, p.705-710. (In Polish)
- 9. Jeżewska-Żychowicz M. (2007). *Zachowania żywieniowe i ich uwarunkowania* (Dietary behaviours and their determinats). Wydawnictwo SGGW, Warszawa, p.1-180. (In Polish)

- 10. Jeżewska-Zychowicz M. (2005). Zachowania żywieniowe młodzieży warszawskiej a środowisko społeczne (Dietary behaviours of young people in Warsaw in the perspective of the social environment). Wydawnictwo SGGW, Warszawa, p.1-165. (In Polish)
- 11. Jeżewska-Zychowicz M. (2002). Wpływ wybranych czynników środowiskowych na sposób żywienia uczennic szkół gastronomicznych (Effect of some environmental factors on nutrition of catering school students). Żywienie Człowieka i Metabolizm (Human Nutrition and Metabolism), 29, p.371-377. (In Polish)
- 12. Komosińska K., Woynarowska B., Mazur J. (2001). Zachowania żywieniowe związane z żywieniem młodzieży szkolnej w latach 1990-1998 (Dieatry behaviours associated with the nutrition of young people in school years). *Żywienie Człowieka i Metabolizm* (Human Nutrition and Metabolism), 28, 1, p.17-25. (In Polish)
- Kremers S.P., de Bruijn G.J., Visscher T.L., van Mechelen W., de Vries N.K., Brug J. (2006). Environmental influences on energy balance-related behaviors. A dual-process view. *International Journal of Behavioral Nutrition and Physical Activity*, 3, p.9-15.
- 14. Rempersaud G.C., Pereira M.A., Girard B.L. et al. (2005). Review Breakfast habits, nutritional status, body weight, and academic performance in children and adolescents. *Journal of American Dietetic Association*, 105 (5), p.743-760.
- 15. Story M., Neumark-Sztainer D., French S. (2002). Individual and environmental influences on adolescent eating behaviors. *Journal of American Dietetic Association*, 108, 3, p.S40-S51.
- 16. Szczepaniak B., Flaczyk E., Górecka D. (2002). Częstotliwość spożywania wybranych produktów w zależności od sytuacji materialnej młodzieży (Frequency of food consumption in relation to the youth finansial situation). Żywienie Człowieka i Metabolizm (Human Nutrition and Metabolism), 29, p.137-142. (In Polish)
- 17. Wajszczyk B., Charzewska J., Chabros E. et al. (2008). Jakościowa ocena sposobu żywienia młodzieży w wieku pokwitania (Qualitative assessment of the diet of young people during the ages of puberty). *Problemy Higieny i Epidemiologii* (Problems of Hygiene and Epidemiology), 89 (1), p.85-89. (In Polish)
- 18. Wierzbicka E., Roszkowski W. (2005). Ocena spożycia żywności z uwzględnieniem produktów typu "fast food" w wybranej grupie młodzieży (Assessment of food consumption including products like "fast food" in a selected group of young people). *Bromatologia i Chemia Toksykologiczna* (Toxicological Chemistry and Bromatologia), supl, p.561-566. (In Polish)
- 19. Wierzbicka E., Stosio A. (2007). Spożycie produktów typu "fast food" przez wybraną grupę młodzieży szkolnej z rejony Warszawy (The consumption of products like "fast food" by a select group of schoolchildren from areas of Warsaw). Żywienie Człowieka i Metabolizm (Human Nutrition and Metabolism), 34, 1/2, p.182-187. (In Polish)
- 20. Wouters E.J., Larsen J.K., Kremers S.P., Dagnelie P.C., Geenen R. (2010). Peer influence on snacking behavior in adolescence. *Appetite*, 55, p.11-17.
- 21. Ziemlański Ś. (1998). *Podstawy prawidłowego żywienia człowieka*. *Zalecenia żywieniowe dla ludności w Polsce* (Fundamentals of proper human nutrition. Nutritional recommendations for the population in Poland.). Wyd. Instytutu Danone, Warszawa, p. 1-245. (In Polish)

## THE STUDENTS' CREATIVE EXPERIENCE ENRICHMENT IN VISUAL ART STUDIOS

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Abstract: The research in the scientific fields show that in order to exist efficiently in the contemporary changeable world a man should use the help of the adaptability with untraditional approaches and the originality potential by enjoying the activities process as creative and by enriching the individual creative experience in different life activities spheres (Sternberg, 2006; Csikszentmihalyi, 2002; Де Боно, 1997; Cropley, 1999). Thus, directly creativity becomes such a psychic process which is important in the development of an individual, Self-perception, and the quality of life (Macnoy, 2003). Such personality's properties as imagination, creativity, the freedom from stereotypes, are emphasized as the basis for the development of social and economic innovations. The aim of a pedagogue's education is a competent teacher who implements acquired studio knowledge and skills creatively, independently and liable in her/his professional activities (Maslo; Tilla, 2005; Koke, 2000; Europian Commision, 2005). Such a teacher influences on pupils' creative activities by his/her creative approach to work (Petersons, 1931). The obtained findings of the research devoted to creativity, an individual, the activities' process, and the mutual interrelation between the activities' process and the related artistic experience, affirmed the importance of the visual arts studio in the creative development of free personality. The aim of the research is to conduct the theoretical analysis of the creativity concept, to clarify pedagogical possibilities of students' creative experience enrichment in visual art studios.

Keywords: creativity, development, personality, enrichment, creative experience, visual arts studio.

#### Introduction

Today one needs a society which understands its internal hidden values and is oriented to human Self-esteem and Self-development during all age stages and in all life spheres. The developmental factors of the social and economic innovation development can be distinguished in such human qualities as imagination, creativity, which are, free from stereotypes. The conditions for sustainable building were mentioned in the UNESCO International Commission Report "Education of the 21<sup>st</sup> Century" (UNESCO, 1999). One of its guidelines invites to enrich human personality in such a way that he/she to be opened for the continuous process of Self-development in order to find his/her place in the contemporary changeable society and to control the quality of own life. The special accent was made on the development of all individual abilities' aspects- to ensure freedom of human thinking, feelings, imagination. Self-realization art is connected with the sense of personality's freedom art is the tool for the investigation of the surrounded world and Self, for the development of creativity and freedom of conscience.

*The aim* of the research is to conduct the theoretical analysis of the creativity concept, to clarify pedagogical possibilities of students' creative experience enrichment in visual art studios.

## Materials and Methods

The scientific literature about creativity and the artistically creative holistic nature of students' creative experience enrichment in visual art studio at higher school was analyzed from the psychological and pedagogical point of view in the given research. The research is based on L. Vigotsky, A. Maslow, V. Druzhinina, D. Leontjev and other scientists, as well as on the author's theoretical analysis of creativity's components.

The empirical method (the Narrative Interview) was implemented in the Riga Teacher Training and Educational Management Academy for students, future teachers in order to clarify their creative experience's enrichment. The elaborated questionnaire included questions connected with the following subject matters: students' knowledge acquisition-(art, visual art language); the development of artistic skills-(personality-art perception and creative activities); the formation of attitudes; the goal awareness (life, contexts). 102 respondents were involved in the survey, they were full- and part- time students, future teachers, attended the course of visual art studio. In order to clarify the possibilities for the students' creative experience enrichment in visual art studios the theoretical analysis of different approaches and findings to the theories of creativity was conducted.

*A creative personality* who is free in his/her will and Self-actualized is the value of any society. In order to characterize the ability of thinking stereotypes' avoidance, one can consider that it is the development of Self-esteem and a personal point of view, and the need for uniqueness, endowed with a will and Self-awareness, which are closely connected with personal Self-feeling and courage. Self-realization in art is connected with the sense of personal freedom, as a person perfects his/her abilities, becomes creative in any spheres of own activities by being developed aesthetically and thus becomes really free. That is why such research conducted by Jung (2009), Guilford, (1956), Csiksentmihaly (2002), Karpova (1994), Bebre (1983) about the essence of creativity are so important today. The authors of different psychological systems pay their attention to the research of creativity investigating its phenomenon in the psychoanalytical system (Jung, 2009), explaining it by subconscious and previously identified processes with the creation of the global image as the base for the process of the individual personality formation or in the humanistic system (Маслоу, 2003; Roger, 1961; Выготский, 1991), recognizing creativity as the natural component of a man's development who is developed at the expected stages. The existed research in the cognitive system, connect creativity with human cognitive and emotional spheres as well (Guilford, 1956; Cropley, 1999).

The theories of the intellectual development, investigates creativity as the sign of human thinking and actions' efficiency, discovering that creativity is human general ability expressed in creative processes. Creativity is potentially owned by each individual and it can be purposefully developed (Дружинин, 2000).

The idea of creativity as the instrument of a personality establishment is included in the context of constructivism as a human life and a personality as the constructed reality are creative products, but the life activities' set is perceived as creative (constructive) activities (Karpova, 1994). There are scientific opinions emphasized the practical component of creativity setting that creativity is such type of activities in the result of which something new and socially essential is created (Sternberg; Lubart, 1999). These points of view are the following: creativity is the result of a personality's property, process or activities (Csikszentmihalyi, 2002); creativity is rooted in its diversity, for example, an individual can be creative in different ways faced different creative experience stages and sequentially participating in them by implementing different personal resources. The representatives of human pedagogy propose more approaches to the problem of human upbringing-one should be natural, free and responsible, harmonious, ethical, believed in spiritual values ideals, or simply happy individual (Gudjons, 1998). Mirroring with theoretical statements' findings, the conception of creativity and the conception of a healthy, Self-actualized personality are similar, emphasizing the notion about the ability of an individual to live in the constantly changeable world. The transformation of the world encourages the personality, he or she has the developed abilities to improvise and they are opened to a hew unexpected situation (Macnoy, 2003). It is also explained by one of the creativity's definitions -Creativity is the necessity to create that is the inborn human quality, one of the existence condition the motivation of which is rooted in the human internal world as the partly conscious desire to be Selfrealized (Дружинин, 2000).

The above-mentioned scientific findings allow concluding that the scientists of the 21<sup>st</sup> century investigated the psychological, pedagogical understanding of creativity and proposed different approaches. Their scientific findings based on the research and scientific results of the 20<sup>th</sup> century, unanimously admit, that creativity as the cognitive and motivational way. Potentially is owned by any normal psyche. In connection with creativity available in the pedagogy' context such characteristic components as abilities, interests, attitudes, motivation, values, general intelligence, knowledge, skills, habits, views were mentioned.

Characterizing the essence of creativity in the pedagogy's context, it is believed that the main function of creativity is the development of human internal world and Self-actualization the following elements are typical for that:

- openness to the new experience;
- the existential experience transfer to the realities of today;

- the trust to the tangible sense;
- creativity (Маслоу, 2003; Roger, 1961; Urban, 2004).

The investigators of creativity believe that there are also the unfavourable components of creativity, for example, the risk's avoidance, striving for successes, stereotypes in thinking and actions, conformism, the exposure to the authority (Маслоу, 2003; Roger, 1961).

Characterizing the visual arts studio process one can mention the creative process emphasized in the Theory by Maslow (Macnoy, 2003), where the creative result is the creative process by itself. That refers to students' and a lecturer' creative collaboration, the purposefully organized studio process where students perfect their original individual cognitive styles, the known ideas' creative technologies, concentrate attention to the achievement of a goal and the ability to discern ideas to the perspective activities. The humanistic point of view links a man with the creative process as the whole, linking that with the idea about psychological well-being as the two-way process consisted of human relations with the society and Self. Any activity including the creative process is the reaction to the experience and the creative incentives of external environments (Sternberg; Lubart, 1999).

The artistic creative activities in visual arts studios the practical knowledge acquisition, skills' and attitudes' set represent students' *creative experience*. The personal activities' approach characterizes the artistic creative operation process as the deliberate, independent, purposeful and freely implemented practice. Thus, in contrast to other activities' ways, the human subjectivity is expressed in the artistic creative operation process. Leontjev (Леонтъев, 1998) structures the artistic creative object consisted of three components-*life, personality's and art work -*as the whole. He recognizes that it is not only the objective visual form of artistic work but also life processes and the artist's objective existing personality. So, the contents of creative artistic activities simultaneously is the creation of art work (the educational aspect is knowledge), the artist's Self-expression (the developmental aspects are skills and perception), and the contents expression connected with life (education aspects are attitudes), but the *human experience* is realized in the system feed-back.

The experience's emergence is the internal process, it is designed always personally, it includes and expresses the personality's individual features, its social and cultural contexts, as well as the Past, Present, and Future (Dewey, 2005). The students' experience is included in pedagogical activities as its subjective component. Learning from the experience is constructivist learning, for example, the personal meaning formation, in the result of which, the students' view to the surrounding world's phenomena is changed as well as their beliefs, values and personality as a whole. A man exploring the world in the artistic creative activities explores Self as well. An artist implements artistic creative activities, and these creative activities influences, the artist in turn. The artist changes the world, but the world changes the artist's *experience*, knowledge, skills and values (Столович, 1999). Conforming the holistic character of artistic activities, the authors emphasize different opposites- they are material and spiritual, the experience and activities (Dewey, 2005), the contents and forms (Арнхейм, 1974), a man and the surrounding world (Фромм, 2002), feelings and mind, objective and subjective, individual and social (Столович, 1999), life, personality, and art work (Леонтъев, 1998). Kagan stresses that thanks to the holistic nature art has the structural similarity with life. It is not only the representation of reality, but the model the aim of which is to supplement the experience of human real life with the imaginative life experience (Каган, 1987).

The creative artistic activities are always practical but in contrast to practical activities they are creative in all aspects: these activities are implemented by the creative personality the creative process occurs within them, the result of these activities is original and creative product (Guilford, 1956; Де Боно, 1997; Дружинин, 2000; Torrance, 1983). The formulaic mechanic activities are contrasted to the creative activities (Birkerts, 1922), but in turn the scientist V.Druzhinin represents the adaptive behaviour in contrast to the creative activities (Дружинин, 2000).

Five parameters characterize the constructivist theory-they are - the students' active involvement, orderliness, the students' activities' principle, the socially symbolic relation and the lifelong development. The student's Self-responsibility for his/her learning increases, and the significance of the student as the subject in the studio process increases as well. So a lecturer's role is changed: from the studio process's dominance and the main knowledge's source she/he becomes the organizer of student's learning, supporter, motivator, from the authoritative controller he/she becomes the

collaboration's partner (Maslo, Tilla, 2005, Helds, 2006). So, the studio process becomes more complex, varied, the lecturer distinguishes students' different learning styles as well as their social and cultural differences, taking care about the involvement of all students in the studio process in order to reveal and develop their own creative individual potential and enrich their creative experience as much as possibly.

**The personal activities' approach** characterizes the artistic creative activities' gradual acquisition process where each stage is a cycle consisting of planning, activities and facts searching, achieving activities' results. Cognitive problems (own and the world's) are jointly solved in the students' and lecturer's interaction and as a result a move to the higher stage occurs, that characterizes the deliberate learning experience' development. The lecturer's and students' effective interaction in the studio activities arrangement includes external as well as internal resources, objective as well as subjective factors.

External resources form the learning environment and tools with the help of which the external or internal action occurs transitioning from a goal to the real result. Internal resources are connected with the lecturer's and students' motivation in the process of creative experience's enrichment.

The effectiveness of studio work is determined by the **objective factors**, they are - the learning contents, pedagogical tools, the lecturer's creative pedagogical activities, students' artistic creative activities, the development of efficient teaching methods, students' cognitive activities, as well as by the **subjective factors** – the lecturer's professionalism and creativity, the level of pedagogical culture, the level of the relationship among students and the lecturer, the possibilities of creativity growth (Table 1).

Table 1

The visual art studio	Objective	Subjective	Students' creative
contents' components	components	components	experience
Art	The internal	The experience,	Skills – visual,
The creation of artistic	content of	the individual's	technical, procedural
work	artistic work,	opinion about	Knowledge-artistic visual
education	artistic materials	the tradition,	language
(professional teaching aids)	and techniques	technical skills	
The personality	The process of	The emotional	<b>Freedom</b> – the experience
Self-development,	making artistic	impulse,	of free, personally
Self-realization learning	work, the	combinations,	significant choice. Own
(Self-learning, individual	creation and	abilities, the	individuality's and internal
abilities, interests,	development of	choice of tools	significance's
needs, values, and the	ideas		(emotional impulses,
personality are developed)			motivation, interests, needs,
			values) cognition and
			development. Independent
			thinking and plasticity.
			Progress, success.
Life,	The topic (a	Emotions,	The attitude
Artistic communication	story, a genre, a	feelings, and	The denial of the rational
in the context of life, the	product's type).	communication	mind's control.
goal and the attitude	The	abilities.	Experiences, feelings and
interaction	implementation		relationship communication
(learns life's phenomena	of the artistic		The aesthetic experience as
and events, aesthetic,	function.		the value in the context of
moral, political,			life. The goal
economical, theoretical and			consciousness.
spiritual values)			

# The contents of the visual art studio

In the contents of artistic creative activities there are all components connected as a whole, and which in turn objectively by **mutual interaction** determine the visual art studio's contents which can

offer students the lecturer. These activities can be indefinitely, **diverse**, suitable for each student's **individual** abilities, interests, and **autonomous** choice.

The artistic creative activities' integrity includes all subjective components of the creative process in the visual art studios, each of these components is connected with some personality's developmental sphere: the *topic* is connected with intellectual, *the experience* is connected with the emotional sphere, *the creative process* is connected with the mental sphere, *the language of art* is connected with the social sphere, *artistic materials and techniques* are connected with the physical sphere, *values' and the goal's components* are connected with the spiritual sphere.

## **Results and discussion**

The narrative interview was conducted at the final stage of the studio course. 102 respondents took part in the survey. They were full-and part-time students, future teachers, of the visual art studio course. The creative experience was measured according to the students' answers in the survey (Table 2).

Table 2

The survey's questions/sphere	The 2% - 40% of students	The 41% - 93% of students revealed during the negotiations that	
<i>Art</i> (learning the artistic specific professional tools)	revealed during the negotiations that		
Which was your previous experience in visual art? Has it been increased?	I painted and drew something after the sample, free will and imagination; the experience was enriched a little	I did not paint and draw the serious works, previously, my experience has been enriched greatly	
What is your idea about the possibilities of visual art acquisition?	Visual art is the possibility to express myself creatively, to create joy	It is possible to develop myself creatively	
What are your technical skills?	I have already known technical matters, I have enriched them a little	I have not known so many techniques before, I can implement them	
Have you expanded your knowledge of the visual art language?	I have already known much of the visual art language, I have expanded knowledge a little	I did not know that the visual language is so wide, I have learnt very much	
The surveys' s questions/spheres	2% - 40% of students	41% - 93% of students	
<b>The personality</b> (learning Self, developed individual abilities, interests, needs, values and the personality)	revealed during negotiations that	revealed during negotiations that	
How easy was to be involved in artistically creative work?	Untied emotional atmosphere helped me to tune to work	The emotional impulse helped me to overcome the psychological barrier	
What have you discover in yourself after the conducted work?	I am quite creative in nature	I did not think how to acquire individual creative abilities	
What was significant for you in the studio course?	Tasks were personally significant, motivated to work	Tasks were interesting and important for life, that is why workshops were exciting	
What new have you discovered in yourself?	I am enough creative interesting and original	We were surprised about our abilities, courage we	

## The narrative interview's results

How do you assess yourself	I am satisfied with myself and with the accomplished	admit that we can be creative We are joyful and satisfied with our creative growth and are surprised by our achievements
The questions of the survey/sphere	2% - 40% of students revealed during	41% - 93% of students revealed during the
Life (learning life phenomena and events aesthetic, moral, political, economic, theoretical and spiritual values)	negotiations that	negotiations that
What did you feel at the time of creative work?	We felt the positive experience playing with artistic materials	The positive experience to find new ideas for own works playfully was felt, one should not invent ideas
Why should one learn art?	In order to be a creative educated teacher	In order to feel art as the experience; in order to be emotionally rich; all life points of view are combined in art; art is not only the beauty, it can be provocative, one can communicate with the help of art, art helps to explore Self

As the creative experience represents the set of knowledge, skills and attitudes, students' answers provided during the time of negotiations allow concluding that the holistic character of artistic creative activities, the personality activities' approach in the visual art studio process promotes the enrichment of creative experience.

## Conclusion

The personal activities' approach in the visual art studio process with the corresponding artistic creative activities' holistic character promotes the students' creative experience. The artistically creative activities' gradual acquisition process is cyclic and it consists of planning, the activities and facts' search during the activities results' achievement.

The students' creative individual potential is jointly revealed in the lecturer's and students' interactive process in the result of which a move to the development of creative experience occurs.

The lecturer and students' efficient interaction in the artistically creative activities' arrangement are included external-the creative studio's environment, as well as internal resources connected with the lecturer's and students' motivation in the process of the creative experience's enrichment.

The studio process's objective factors, they are-the studio's contents, pedagogical tools, the lecturer's creative pedagogic activities, students' artistically creative activities, students' cognitive activities, and the studio process' subjective factors, they are the lecturer's professionalism and creativity, the level of pedagogical culture, the level of interactive relationships, the possibility of the personal growth promote the enrichment of creative experience. So the artistically creative activities' content in the visual art studios at higher school is simultaneously creating art work during which students', future teachers, acquire knowledge in the theory of art. The students' Self-expression are represented in their developed artistic skills and perception, the development of attitudes and the contents' expression connected with life. The most important matter is that the feedback is realized in **students' creative experience**.

## References

- 1. Bebre R. (1983). *Dailrades procesu psiholoģija* (Creative process in psychology). Rīga, p. 98. (In Latvian)
- 2. Birkerts P. (1922). *Daiļradīšanas psiholoģija. I daļa. Mākslinieka personība* (Psychology of Creativity. The artist's personality). Kultūras balss, Rīga, p. 256. (In Latvian)
- 3. Csikszentmihalyi M. (2002). *Flow: The Classic Work on How to Achieve Happiness*, Rider, London, p. 314.
- 4. Cropley J.A. (1999). Creativity and Cognition: Producing Effective Novelty. *Roeper Review*, Vol. 21, Taylor & Francis group, pp. 250-260.
- 5. Dewey J. (2005). My pedagogical creed, School Journal, vol. 54, pp. 77-80.
- 6. Jungs G. (2009). *Psiholoģiskā tipoloģija un māksla* (Psychological Typology and Art). Zvaigzne ABC, Rīga, p. 100. (In Latvian)
- Europian Commision (2005). Common Europian principles for teacher competences and qualifications, [online] [01.12.2012]. Available at http://europa.eu.int/comm/dgs/education\_culture.
- 8. Gudjons H. (1998). *Pedagoģijas pamatatziņas* (Pedagogy basic insights). Zvaigzne ABC, Rīga, p. 394. (In Latvian)
- 9. Guilford J.P. (1956). The structure of creativity and intelligence on academic prefomance, *Psychol. Bull.* N 53. pp. 267–293.
- Helds J. (2006). Mācīšanās kā konstruktīvs un sistēmisks jēdziens (Learning as constructive and systemic concept). No zināšanām uz kompetentu darbību. LU akadēmiskais apgāds, Rīga, pp. 31–35. (In Latvian)
- 11. Karpova Ā. (1994). *Personība un individuālais stils* (Personality and individual style). Latvijas Universitāte, Rīga, p. 291. (In Latvian)
- 12. Koķe T. (2000). *Skolotāju izglītības kvalitātes kritēriji* (Quality of teacher education criteria), LU, PPI, Rīga, p. 5. (In Latvian)
- Maslo I., Tiļļa I. (2005). Kompetence kā audzināšanas ideāls un analītiska kategorija (Competence as an ideal educational and analytical grade), Skolotājs, Nr. 3, Raka, Rīga, pp. 4– 9. (In Latvian)
- 14. Pētersons E. (1931). *Vispārīgā didaktika* (General didactics). Izd.A.Gulbis, Rīga, p. 130. (In Latvian)
- 15. Roger C. (1961). On Becoming Person. Houghton Mifflin Company, Boston, p. 420.
- 16. Sternberg R.J. (2006). The Nature of Creativity. *Creativity Research Journal*, Vol. 18, No.1, pp. 87–98.
- Sternberg R.J., Lubart T.I. (1999). The Concept of Creativity: Prospects and Paradigms. Sternberg R.J.(Ed.). Handbook of Creativity. Cambridge University Press, New York, 1999, pp. 3-15.
- 18. Torrance, E. P. (1983). *Creativity in the Classroom*. National Educational Association, Washington, DC, p. 36.
- United Nations Educational, Scientific and Cultural Organisation (UNESCO), 1999. Appeal by the Director-General for the Promotion of Arts Education and Creativity at School as Part of the Construction of a Culture of Peace, [online] [22.05.2009]. Available at <u>http://portal.unesco.org/culture/en/ev.php-</u> URL\_ID=9747&URL\_DO=DO\_PRINTPAGE&URL\_SECTION=201.html
- 20. Urban K.K. (2004). *Kreativität* (Creativity). LIT, Munster, pp. 46-51. (In German).
- Арнхейм Р. (1974). Искусство и визуальное восприятие (Art and Visual Perception). Прогресс, Москва, 477 с. (In Russian)
- 22. Боно Э. Де (1997). Латеральное мышление (Lateral Thinking). С.Петербург, 316 с. (In Russian)
- 23. Выготский Л.С. (1991). Воображение и творчество в детском возрасте (Imagination and creativity in childhood) Просвещение, Москва, 90 с. (In Russian)
- 24. Дружинин В.Н. (2000). *Психология общих способностей* (Psychology of general capacities). Питер, С.Петербург, 356 с. (In Russian)
- 25. Каган М. (1987). Искусство как феномен культуры (Art as a cultural phenomenon). Искусство в системе культуры. Наука, Ленинград, 6–21 с. (In Russian)

- 26. Леонтьев Д. (1998). *Введение в психологию искусства* (Introduction to the psychology of art). Московский университет, Москва, 110 с. (In Russian)
- 27. Маслоу А. (2003). *Мотивация и личность* (Motivation and personality). С.Петербург, 351 с. (In Russian)
- 28. Столович Л. (1999). *Философия. Эстетика. Смех* (Philosophy. Aesthetics. Laughter). С.Петербург Тарту, 330 с. (In Russian)
- 29. Фромм Э. (2002). Личность в современной культуре. *Психология личности. Том 2 хрестоматия* (The identity in contemporary culture. □Psychology of personality. Volume 2 Reader). БАХРАМ-М, Самара, 233-246 с. (In Russian)

## EVALUATION OF POTENTIAL ECONOMIC LOSSES OF CONSEQUENCES OF TOBACCO USE

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**Abstract:** Use of tobacco goods is a global problem with serious consequences for society's health. The health of each individual and the society in general is influenced by different factors – social, economic, environmental, habits of way of life etc. One of such bad habits – smoking – causes economic losses both for individual persons, for companies and for the society in general. These losses include direct and non-direct medicine costs, as well as productivity losses. Statistical data of the World Health Organization, the Latvian Central Statistical Bureau, the Centre of Demography, the Ministry of Health and the Centre for Health Economics are summarized and analyzed in the study, which allow concluding that the morbidity and mortality caused by spreading of tobacco goods' use decreases the potential of economics and causes substantial losses for the national economy of Latvia.

Keywords: use of tobacco goods, potential economic losses.

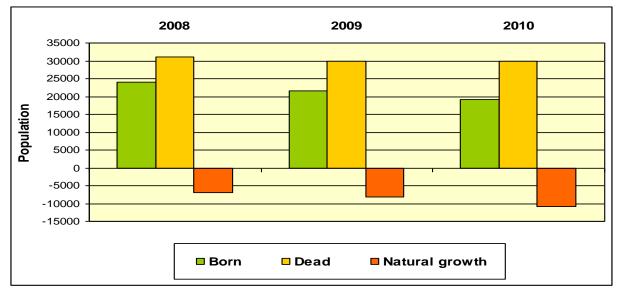
#### Introduction

Statistical data prove that beginning with 1990 the population number in Latvia has gradually decreased. Until the middle of the nineties of the twentieth century the changes of population number were mostly influenced by the migration. Starting with 1991, as a result of rapid decrease of birthrate and increase of mortality, the natural growth of population number in Latvia is negative. According to "Eurostat" data Latvia has one of the highest death rates and one of the lowest birthrates in the European Union. Herewith the specific weight of older people in Latvia has a tendency to increase. If the specific weight of population over 60 years was 17,4% in 1970, then in 2009 it was 22,3% of the total number of Latvia's population (Iedzīvotāju dimanika, 2011). Demographic situation in Latvia has been worsened by the economic crisis as well, by decreasing the number of economically active people in connection with emigration to other countries. Emigration increases the risk of birthrate decrease, because these are mostly young people leaving Latvia. That is why the government of Latvia's population.

Health is one of the life quality indicators. The health of each individual and the society in general is influenced by different factors - social, economic, environmental, habits of way of life etc. Spread of bad habits negatively influences the health. One of such bad habits is smoking. The General Convention on Tobacco Control of the World Health Organization came into force in Latvia on May 11, 2005. The aim of the Convention is to protect the present and the future generation against the negative health, social, environmental and economic consequences caused by use of tobacco goods (LR Saeima, 2004). The Regulations No. 868 of the Cabinet of Ministers "On supplementation of packing unit of tobacco goods with color photo images or illustrations", which have been issued in accordance with the Law of the Republic of Latvia "On restriction of production, realization, advertising and smoking of tobacco goods", defined to supplement the pack of cigarettes with color photo images or illustrations until 01.03.2010, which was executed. However, the latest data of the study of the Directorate General Health and Consumer of the European Commission- Eurobarometer prove that 36% of the Latvia's inhabitants still smoke (RD LD, 2011). Smoking causes economic losses both for individual persons and for the national economy in general. These losses include direct and non-direct medicine costs, as well as productivity losses. That is why the aim of the study is to evaluate the potential economic losses, which derive to result from the use of tobacco goods.

## Materials and methods

Statistical data of the World Health Organization (WHO), the Latvian Central Statistical Bureau (LCSB), the Centre of Demography (CD), the Ministry of Health (MH) and the Centre for Health Economics (CHE) are summarized and analyzed in the study.



# Figure 1. Indicators of natural movement of population number in Latvia according to LCSB data

- According to LCSB data the indicators of natural movement of population number in Latvia are as follows (Figure 1):
  - Born: in 2008 23948, in 2009 21677, in 2010 19220 people;
  - Dead: in 2008 31006, in 2009 29897, in 2010 29970 people;
  - Natural growth of population is negative: in 2008 (-7058), in 2009 (-8220), in 2010 (-10750) people.
- According to CHE data:
  - Dead from blood circulation system diseases: in 2008 16516, in 2009 16078 people;
  - Dead from oncologic diseases: in 2008 5930, in 2009 6027 people;
  - Dead from respiratory system diseases: in 2008 725, in 2009 650 people.

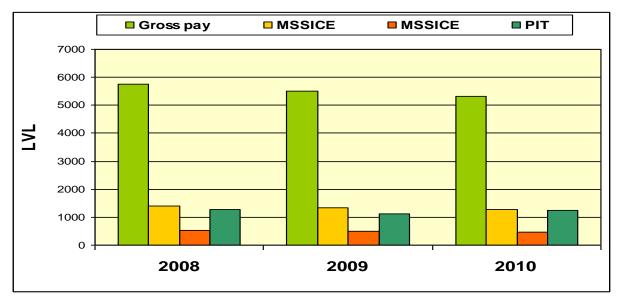


Figure 2. Gross pay of the employees, Mandatory State Social Insurance Contributions of the Employer, Mandatory State Social Insurance Contributions of the Employee, Personal Income Tax on average in a year according to LCSB data

- According to LCSB data the gross pay of the employees on average in a year in LVL (Figure 2):
  - in 2008 5753.00,
  - in 2009 5518.00,
  - in 2010 5333.00;
- Mandatory State Social Insurance Contributions of the Employer on average in a year, LVL:
- in 2008 1386.00,
- in 2009 1329.00,
- in 2010 1285.00;
- Mandatory State Social Insurance Contributions of the Employee on average in a year, LVL:
- in 2008 518.00,
- in 2009 497.00,
- in 2010 480.00;
- Personal Income Tax on average in a year, LVL:
- in 2008 1289.00,
- in 2009 1126.00,
- in 2010 1253.00.

## **Results and discussion**

Due to the rapid decline of birthrate and increase of mortality the natural population growth in Latvian since 1991 has been negative. According to LCSB data analysis it is seen that the natural growth of population number if comparing it with the previous year:

- in 2009 has decreased by 16,5%, but
- in 2010 has decreased by 30,8%.

The main causes of death among population of Latvia are non-infectious diseases: 53.8 % of causes are related to diseases of the circulatory system, 19.9% to malignant tumours and 7.2% to external causes. Death rate from the cardiovascular diseases in Latvia is the highest in the European Union and the average age of premature death is the lowest in the EU. The total oncological morbidity rates in Latvia are not considerably different from the average rate in the EU (except the lung cancer) but the mortality rates are higher than in the EU. The mortality triggered by external cause is essential in people at working age and in children. In the external cause death group mortality in women (42.5 cases per 100 000 people) considerably differs from mortality in men (157.8 cases per 100 000 people). Standardized mortality rate prove that in Latvia 48% of men die under the age of 65 (women - 28%) while in the European Union only 29% of men die under the age of 65. (LR MK, 2010).

Health of each person and public health in general is affected by different factors - biological, psycho-emotional, social, economic and environmental and by people's life style. Healthy way of life without bad habits plays a significant role in health maintenance and improvement. Substantial problem of society's health in Latvia is cardiac and blood circulation diseases. The main risk factors, which facilitate the development of cardiac and blood circulation system diseases, are: unhealthy food, insufficient physical activity and smoking.

Smoking is an important risk factor of several chronic diseases like oncologic, blood circulation, respiratory system diseases and diabetes. Long-time smoking influences also the digestive apparatus and reproductive system, leaved a negative impact on mouth and teeth health and functional abilities of lungs (Pudule, Villeruša, Grīnberga, 2011). The WHO data prove that damages of human's body caused by smoking are one of the most often mentioned death causes in the world. Every year about 5.4 million people die from the use of tobacco products. The countries with the highest rate of smoking population in Europe are Greece, where 42% of people confirm that they smoke, Bulgaria, 39% of smoking people, and Hungary with 38% of smoking population. The lowest rate of smoking population is in Sweden (16%) and Finland (21%). Latvia has the highest rate of smoking population in the Baltic countries. 32% of people smoke in Estonia and 30 % of people in Lithuania (RD LD, 2011).

Even though tobacco policy in the EU is mainly initiated and developed by the Health and Consumer Protection Directorate-General, all the legislation on labelling, advertising and product regulation has been based on the internal market legislation (Stahl, Wismar, Ollila, 2006). To reduce tobacco use prevalence, Latvian law constantly undergoes amendments. The aim of the Law "On restriction of realization, advertising and use of tobacco goods", according to the General Convention on Tobacco Control of the WHO (hereinafter the Convention) is to protect the human health and rights to clean environment that is tobacco smoke-free, as well as to define the order, by which the state controls the production, introduction (import) and realization of tobacco and tobacco goods, advertising and smoking of tobacco goods in public places, observing the rights and interests of inhabitants. In their turn, the Regulations No. 868 of the Cabinet of Ministers "On supplementation of packing unit of tobacco goods with color photo images or illustrations" define the order, in which, together with special warnings included in the third part of the Article 6 of the Law "On restriction of realization, advertising and use of tobacco goods", the packing units of tobacco goods are supplemented with color photo images or other illustrations (combined warning) in compliance with the appendix to these regulations. In its turn, the aim of the Tobacco Control State Program for 2006-2010 is to improve the health of Latvia's population by substantial decrease of tobacco use and protection against the harmful influence of tobacco smoke. On October 5, 2011 the Cabinet Order Nr.504 "The Public Health guidelines for the period 2011 to 2017" came into force, whose main aim is to increase the lifespan of the people of Latvia and to determine the main areas for the state policy to ensure the quality of life of the population by taking all possible measures in prevention of diseases caused by external factors and human lifestyle (LR MK, 2010).

Although the changes of the Latvian legislation in the sector of tobacco control comply with the requirements of the WHO's Convention, and corresponding amendments are constantly made in the normative acts, still, the specific weight of smokers is still relatively high. Tobacco in Latvia is the third most important risk factor among other factors, which facilitates bad health and untimely death, or the so-called disease burden (TAKLNK, 2011). The Ministry of Health reports that about 4000 active and about 1500 passive smokers die each year in Latvia (LR VM, 2009). The losses for national economy include in general both the direct costs, which refer to the health care costs connected with diseases, which are caused by smoking, and the non-direct costs, which are connected with productivity loss, and the losses resulting from default of payment of the Personal Income Tax and the Mandatory State Social Insurance Contributions.

The potential losses of the state resulting from uncollected taxes (Personal Income Tax and Mandatory State Social Insurance Contributions) constitute 16,8 million lats on average in a year.

Latvian economic development is an important prerequisite for economic growth and increase of life quality. EU statistical office "Eurostat" data show that the Latvian gross domestic product (GDP) per capita at purchasing power parity in 2008 (56%) and 2009 (49%) and 2010 (51%) was the third lowest in the European Union, just ahead of Romania and Bulgaria. GDP level is affected by economically active population in the labor market, as well as productivity. Decrease in the supply of skilled labor in the labor market leads to decline in GDP. The overall educational level of Latvian population is relatively high, but as a drawback in human resources health status, and smoking prevalence can be mentioned. Poor health and short working period hamper economic growth and increases social burden to society, so the Government should implement policies that promote economic growth, while ensuring the quality of life and human development.

## Conclusions

- The proportion of daily smokers in recent years tends to decrease slightly, but tobacco use among Latvia's inhabitants is still high;
- The morbidity and mortality caused by the spread of tobacco goods' use decrease the potential of economics and cause substantial losses for Latvia's national economy, negatively influence the development chances and increase of level of social welfare.
- The natural growth of population of Latvia is tended to decrease. The growth of specific weight of older people in a long-term perspective will negatively influence the social budget that is why the government of Latvia must implement such policy, which would facilitate essential improvement of life quality of population, which could decrease the emigration of economically active people and facilitate the growth of birthrate.

## References

- LR MK (Ministru kabinets). Sabiedrības veselības pamatnostādnes 2011.-2017.gadam (2010). (Public Health Guidelines 2011-2017), [online] [20.09.2011]. Available at http://www.scribd.com/doc/46821465/4683Sab-vesel-141210-PVO (In Latvian)
- LR Saeima. Likums "Par Pasaules veselības organizācijas Vispārējā konvencija par tabakas uzraudzību (2004). (Law "On the World Health Organization's General Convention on Tobacco Control"), [online] [26.08.2011]. Available at <u>http://www.likumi.lv/doc.php?id=98236</u> (In Latvian)
- LR Saeima. Likums "Par tabakas izstrādājumu realizācijas, reklāmas un smēķēšanas ierobežošanu" (1997). (Law "On restriction of realization, advertising and use of tobacco goods"), [online] [25.08.2011]. Available at <u>http://www.likumi.lv/doc.php?id=41774</u> (In Latvian)
- LR VM (Veselības ministrija). Informatīvais ziņojums par Tabakas uzraudzības valsts programmas 2006.-2010.gadam īstenošanu 2007.-2008.gadā (2009). (Informative report implementation of the State Tobacco Monitoring Program for 2006 -2010 in 2007-2008), Rīga, pp. 42.,[online] [26.09.2011]. Available at polsis.mk.gov.lv/LoadAtt/file47794.doc (In Latvian)
- Iedzīvotāju dinamika. (Dynamics of population), Latvijas Universitātes Demogrāfijas centrs (LU DC), [online] [20.09.2011]. Available at <u>http://www.popin.lanet.lv/lv/stat/stat.html</u> (In Latvian)
- Pudule I, Villeruša A, Grīnberga D. u.c. (2011). Latvijas iedzīvotāju veselību ietekmējošo paradumu pētījums 2010 (Health Behaviour among Latvian Adult Population, 2010), Veselības ekonomikas centrs, Rīga, pp. 32. [online] [10.10.2011]. Available at http://vec.gov.lv/uploads/files/4e672991e40ef.pdf (In Latvian)
- RD LD (Rīgas domes Labklājības departaments). Aptauja: Latvijā ceturtais lielākais smēķējošo skaits starp ES dalībvalstīm. (Poll: Latvian fourth largest number of smokers among the EU Member States), [online] [29.08.2011]. Available at <u>http://www.narcomania.lv/pub/index.php?id=211&gid=53&lid=513</u>
- 8. Stahl T., Wismar M., Ollila E. (2006). *Health in All Policies. Prospects and potentials*. Ministry of Social Affairs and Health, Finland, p.55-59.
- TAKLNK (Tabakas un alkohola kontroles Latvijas nacionālā koalīcija). Tabaka = novēršams nāves cēlonis (Tobacco = preventable cause of death), [online] [22.09.2011]. Available at <u>http://taklnk.wordpress.com/2010/03/30/31-marta-ikgadeja-konference-par-aktualitatem-tabakas-kontrole/</u> (In Latvian)
- 10. Дальке Р., Дальке М. (2010). *Психология курения*. (Psychology of Smoking). Санкт Петербург: Весь, р. 72-76 (In Russian)

# COOPERATION OF SCHOOLS AND PUBLIC ORGANIZATIONS IN MASTERINGTHE EDUCATION OF HOME ECONOMICS

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**Abstract:** The article studies the possibilities of cooperation among schools and public organizations in acquiring household education. In 2011/2012, a research was carried out in Bauska Region, surveying and interviewing pupils, craftsmen, entrepreneurs and representatives of public organizations. After the analysis of the obtained data, it could be concluded that pupils practically apply the acquired household skills in their everyday life, they are interested in traditional crafts and willing to train traditional kinds of crafts in creative workshops. To promote the interest of pupils about traditional crafts and foster cooperation among schools and public organizations in acquiring household education, the following suggestions have been provided: to organize open workshops at schools, to ensure that pupils attend craft workshops and enterprises, to ensure cooperation among schools, to improve the forms of organization of learning.

Keywords: household, craft, education, cooperation.

## Introduction

Up to now very few pedagogic studies have addressed the issue of importance of education in retaining local traditions, e.g., crafts in relation to the structure and contents of education. After Latvia joined the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage, an issue about retaining the skills of traditional crafts with the help of formal and non-formal education has become a topical issue in the field of education (UNESCO, 2006, 2,3). Until the 20th century skills of the traditional crafts were inherited within a family. Now in order to foster the process of mastering crafts, educational and public institutions need to get involved.

Nowadays craft as a type of business has a development prospective in the rural environment. To develop the crafts traditions on the countryside, an educational orientation at primary school is needed. Mastering of home economics and technology subjects has the most direct relation to crafts orientation in the school curricula. Continuation of traditions in this field could be fostered by including crafts related topics in the content of the primary education home economics subject and by developing cooperation among educational institutions, crafts centres and craftsmen. How to bring crafts closer to the education?

**Objective of the article** is to research the potentialities for development of cooperation among schools, craftsmen, crafts centres, businessmen, museums and public organizations in the field of mastering the home economics subject.

## Materials and methods

In 2011/2012, a research was carried out in Bauska Region, surveying and interviewing pupils, craftsmen, entrepreneurs and representatives of public organizations. The author has developed a questionnaire "Cooperation among Schools and Craftsmen in Acquiring Household Skills". To analyse the survey data, the method of qualitative data processing is applied.

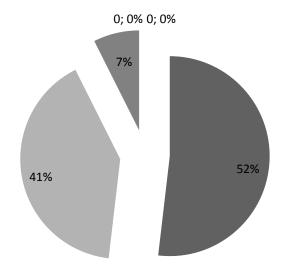
## **Results and discussion**

Techniques of the traditional crafts were included in the contents of the home economics subject during the period of the first independence of Latvia in the 30s of the 20<sup>th</sup> century. They were mainly related to the fancywork. This trend was promoted by pedagogues and art historians working at the Home Economics Institute of Latvia. The curriculum of the Institute included such academic subjects as Ornamentics, Folk Art and Art History as well as the practical work during the learning process – fancywork, weaving, artistic craft (Ozoliņa-Ķeņģe, Auziņa-Smith,1989, 49, 274).

Representatives of the direction of ethno-pedagogy activate this issue in a complex context of acquisition of the traditional culture (Silina-Jasjukeviča, 2010). The traditional crafts characterize the ethnographic particularity of each region. Due to various factors many traditional crafts characteristic to Zemgale are barely retained or have even completely disappeared (Danauskas, Lekavičiene, 2011, 213). Nowadays the relation to the traditional crafts and ethnographic heritage is provided also in the standard for mastering home economics and technology subjects for Grades 1 to 9. Curriculum sample for learning textile for Grades 5 to 9 emphasizes greatly learning the ethnographic pattern, but the curriculum sample for learning wood and metal materials mentions learning the ethnographic pattern only for Grade 5. Also preparation of research works and visiting masters of crafts are mentioned as examples of learning methods.

There is a discussion within the society whether the contents of the home economics subject will be topical after 10 years, whether the skills acquired will be useful (Cālīte, 2011). Including the crafts in the school curricula is popular in the so called *free schools* (www.drustutautskola.lv, www.marasskola.lv), where teachers put to use findings of the humanistic pedagogy and the pupils' parents do not doubt the usefulness of the acquired skills. In order to clarify the actual situation, in 2011/2012 a survey was carried out in schools of Bauska municipality by surveying 135 pupils from Grades 5 to 9. Pupils answered 11 questions. The questions of the survey were related to the traditional crafts within the family and home economics classes, about the pupils' interest to learn the crafts from the masters of crafts as well as about the creative activities as the organizational form of the learning.

A question whether pupils used the skills learned at the home economics classes in their everyday lives was answered by the majority of respondents positively (52%); party used 41% and never used 7% (Fig.1.)



# Figure 1. Use of skills learned at the home economics classes in everyday life (%)

Fancywork (41%), preparation of the traditional food (23%), construction (14%), carpentry (13%), and metalworking (9%) were those crafts that were mentioned by pupils as inherited within the families. Fancywork and wood-processing were the main crafts that were specified by pupils as worth to be taught to their peers. 9% of pupils have knowledge about the crafts of the region, 51% have partial knowledge, but 40% do not have any knowledge. 18% of pupils have knowledge about the Latvian ornament, 76% know the ornament only partly and 4 % do not know it. 38% of pupils participate in exhibitions with their works produced in the classes of home economics, 62% do not participate in exhibitions, and none of the respondents had participated in exhibitions outside their schools.

As regards the forms of creative activities, pupils are the most keen to participate in the creative workshops (50%), camps (29%); there is a smaller willingness to participate in competitions (8%), work on research works (8%) and participate in exhibitions (5%).

The results by number of the survey show that pupils would mainly like to learn wood-processing (57), forging (51) and ceramics (48) additionally (Fig.2). According to the survey data pupils have understanding about crafts and they are willing to improve their skills in particular types of crafts. Assuming that pupils are open to mastering new skills and use them in their everyday lives, it would be desirable to foster learning the traditional crafts. Improvement of the skills could take place by organizing creative activities such as workshops, camps, competitions, exhibitions, preparing research works etc.

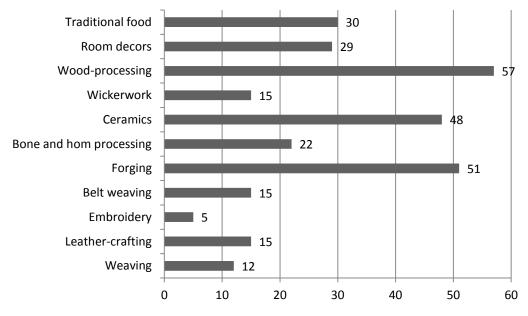


Figure 2. Crafts that pupils would like to learn additionally

With small rural schools becoming the centres of expertise, a perspective of creation of *open crafts workshops* in the home economics rooms of schools becomes apparent (Fig.3). Thus the technical resources of these rooms would be used rationally, craftsmen would be involved and people of various generations would have an opportunity to spend their time meaningfully. Several craftsmen from Zemgale have agreed to get involved in teaching home economics in the *open workshops*. These are craftsmen who can welcome pupils in their own workshops as well as craftsmen who can conduct classes in off-site workshops.

There is already experience in teaching the subject of home economics by having various classes conducted at crafts centres and private crafts workshops. Such practice has been obtained also by museums where classes are thematically linked to the curricula of home economics. Provision of pupils with information about the ethnographic articles, tools and ancients crafts is the educational function of museums.

Public organizations coordinate craftsmen, businessmen as well as unite the pupils' parents. Businessmen play a significant role in the development of crafts. Part of craftsmen have their own enterprises where pupils can get acquainted with the layout of the workshop, to see the process of work and get involved in carrying out some particular activities. This experience will be useful for pupils when choosing a profession as a possibility to build a crafts related business. Businessmen working with the local resources can establish creative workshops for pupils where production byproducts are processed.

Schools can mutually cooperate in teaching particular topics of home economics by organizing exchange of pupils as each school has some specific equipment that is not available in other schools. Thus rarely used equipment would be used rationally.

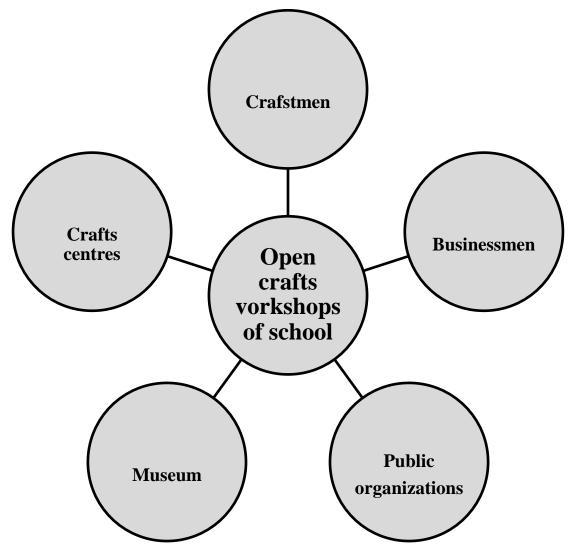


Figure 3. School as an openinstitution (created by the author)

# Conclusions

- The interest of pupils in craft will be promoted by means of diversifying the forms of organization of learning and improving the learning content within the acquisition of household in forms 5 - 9. The suggestions in this respect are as follows:
  - Organization of open workshops, involving household activities
  - Attendance of craftsmen, crafts centres and craft businesses; ensuring of practice and carrying out research
  - Cooperation among schools
  - Classroom and extra curricular activities creative workshops, camps, competitions, exhibitions, scientific research.
- 2. Promotion of cooperation among schools and public organizations will encourage activities of craftsmen and entrepreneurs, as well as increase employment in rural regions.
- 3. By means of purposefully cultivating craft traditions in household education in long-term, the intangible cultural heritage typical of the Zemgale Region will be preserved and popularized.

## References

- 1. Biedrības "Tautskola 99 Baltie zirgi" pamatskolas nolikums (The regulations of elementary school society "Elementary school 99 White Horses", [online] [10.01.2012]. Available at
- 2. <u>http://marasskola.lv/skola/skolas-nolikums/#saturs</u> (In Latvian)
- Cālīte A. (2011). Zināšanas, praktiskās nodarbības un prasmes. Kas ir būtiskākais mūsdienu mācību stundās? (Knowledge, practice and skills. What is most important in today's lessons?), [online] [12.01.2012]. Available at <u>http://www.lvportals.lv/?menu=doc&id=230010</u>
- Danauskas J., Lekavičiene E. (2011). Tradicijos ir dabartis Žiemgala. Zemgale. Tradīcijas un tagadne. (Zemgale. Traditions and the present). Standartu spaustuve, Vilnius, Lithuanian, p. 213. (In Lithuanian and Latvian)
- Mājturība un tehnoloģijas. Mācību priekšmeta standarts 1.-9.klasei (2006). (Home Economics and Technology. The subject standard 1 to grade 9), [online] [12.01.2012]. Available at <u>http://www.mk.gov.lv/doc./2005/N1586\_6p18.doc</u> (In Latvian)
- Ozoliņa-Ķeņģe M., Auziņa-Smith I. (1989). Kaucmindes Mājturības seminārs un Latvijas Mājturības institūts (Kaucminde Home Economics Seminary and the Latvian Home Economics Institute). Kaucminde Home Economics and the Latvian Home Economics Institute graduates group, Almeley, England, p. 49, 274.
- Siliņa –Jasjukeviča G. (2010). Tradicionālā kultūra izglītībā. (Traditional culture in education), [online] [10.01.2012]. Available at <u>http://www.tavaskola.lv/node/259</u> (In Latvian)
- 8. UNESCO Konvencija par nemateriālā kultūras mantojuma saglabāšanu (2006). (UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage). UNESCO Latvijas Nacionālā komisija, Rīga, Latvia, pp. 2-3. (In Latvian)

## CHANGE OF DIRECTION OF HOME ECONOMICS SUBJECT

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**Abstract:** Education in Latvia is also influenced by the rapid changes in the globalisation of the world, transformation of socially political attitudes, boom of information technologies and other factors. The changes in education paradigms are closely connected with the change of values in education. One of the manifestations of the education paradigm is transition from the traditional society to the knowledge society. In knowledge society, people play the leading role. The changing education paradigms have determined the need for new education programmes. The home economics subject is one of those that are included in the list of subjects for programmes of primary education. The changes in education paradigms have affected also this subject. The aim of the research is to study the changes in the content of the home economics subject in practice, emphasizing the self-reflection of pupils. The main conclusions: home economics programmes have previously included different topics, emphasising the political viewpoints and education tasks of those times; today the pupil's understanding about the safety and quality conditions of the living environment is emphasized in home economics, thus acquiring the experience of creative activity. The research data testifies to the fact that changes in the analysis of the home economics subject can be observed among the groups of the respondents.

Keywords: paradigm, programme, Home Economics subject.

## Introduction

The 21<sup>st</sup> century can be characterised by rapid changes in politics, economics, national economy, as well as education in Latvia. Within the different social systems and at all times, education has always been, is and will remain the most important, essential, persistent and relevant development factor and value that does not provide the result or profit directly, but ensures appearance of it in a certain period of time through new ideas, tasks, new attitudes and competences of every next generation (Zīds, 2007). Analysing the problems and opportunities of the changes in education, M.Fulans emphasizes that the changes should focus on all public institutions and their interaction, while education has a special task – to step forth and assist in retaining the correct orientation (Fulans, 1997). To increase our human capital and fully make use of other - cultural, natural or economic resources, a change in education paradigm is necessary (Latvijas ilgtspējīgas attīstības stratēģija līdz 2030.gadam, 2010). Paradigm - a set of different items, phenomena grouped according to a certain principle, feature, elements of which are interrelated within a vertical and horizontal plane (Pedagoģijas terminu vārdnīca, 2000, 118). The scientist I.Beļickis relates the concept of paradigm with the changes of values in education, emphasizing that the humane paradigm in education is the scientific view of the world as regards education (Belickis, 2000). Analysing paradigms in education research, K.Niglas emphasizes that paradigm is very closely connected with philosophical level (Niglas, 2001). I.Katane considers that the education paradigm reflects the dominating views of society about the education mission, its aims and tasks in a specific time and education area, but the contradictions and problems of the modern education should be studied and solved on the basis of the ecological approach. The modern education environment is typical of different education paradigms (Katane, 2007b; Katane, 2007a). O.Zīds accents that the common paradigm of the 21<sup>st</sup> century is learning to think systematically, find ones own role in the society both as a consumer and a new product leader, be a partner that is open and interested in the society, as well as responsible and compliant (Zīds, 2007).

A Memorandum on Lifelong Learning was signed in Brussels in 2000, accenting that people play the leading role in the knowledge society. The human ability to efficiently and wisely create and apply knowledge in continuously changing conditions is valued most. To fully develop this ability, people need to wish and to be able to shape their lives, i. e., become active citizens. Education and training throughout the whole life – that is the best way towards being able to survive the challenge of changes (Mūžizglītības memorands, 2000).

In the Latvian National Development Plan, human is proposed to be the one to ensure the growth of the state: "Our chief resources that can enable the whole society and each individual to reach the standard of living that developed countries have attained are the people's knowledge and wisdom, as well as their ability to use them efficiently and purposefully (Latvian National Development plan 2007-2013, 2006, 8).

Such Latvian scientists as B.Rivža and M.Krūzmētra state that the 21<sup>st</sup> century requires a human that has not only acquired knowledge, but also is able to think and act creatively, i. e., to use the acquired knowledge creatively, and able to adapt to the rapid changes in economics, politics, culture, at the same time capable of creating such changes (Rivža, Krūzmētra, 2007, 7).

Analysing the education processes, points out the three main paradigms or three basic approaches to education:

- 1) socially public;
- 2) personal;
- 3) socially personal (Meņšikovs, 2007).

The socially public approach is typical of the public and societal interests and needs prioritized in respect of pupil's interests and needs. Such an approach is promoted by several conditions and reasons. It existed and continues to exist in societies with a strict centralised national regime; there are two variants of such an approach: authoritarian and manipulative. The authoritarian manner has been used in lots of schools in the world by education organizers and teachers since the beginning of the learning process until now. In such conditions, teachers become authoritative personalities, and the children upbrought by them are subject to this perspective as well. The essence of the manipulative approach is the special organization of teaching and upbringing. Teachers wish to hide their ruling over children the make their influence and affect on children invisible. They do it because they wish to overcome the pupils' resistance to teaching and upbringing, thus increasing education efficiency.

The personal approach is characterised by the dominance of the personality's interests and needs of pupils over the societal and public interests. Efficient education is impossible without active participation of personality that is not suppressed; the pupils should act willingly. Two orientations of the personal approach should be mentioned: free upbringing and personal approach with the pedagogical support.

The third paradigm is the socially personal approach. In this case the social orientation of education is retained without which gradual cultural, meaning also societal, development lags behind. However the education system in general and each school separately form the main conditions and opportunities for a free, valuable and peculiar personal development of pupils. The socially personal approach lets pupils criticize teachers and organizers.

The transition from the traditional to the knowledge society is one of the main manifestations of the education paradigm. It leads to different discussions, justifications and arguments. Analysing the understanding of the traditional and knowledge society, the scientist T.Koke states that the difference in the perception of freedom in the context of education and upbringing is especially topical (Koke, 2007). In the traditional society it relates to getting rid of limitations, while in the knowledge society freedom is guaranteed by the human ability to be able to act on the basis of different competences. The material basis of the knowledge society, in turn, is the knowledge-based economical development that expands the possibilities to protect and strengthen the level of welfare of the society.

Traditional society schools accent subjects, evaluate pupils' achievements in the knowledge context, accept isolation of education degrees, allow dominance of a strict hierarchical structure and limited liability (Koke, 2007). The ability to ensure a high degree of innovation and promote a high level of participation is the way towards the knowledge society.

Qualitative and creativity-oriented education that is available throughout the whole life is a need typical of the 21<sup>st</sup> century – it allows to respond to the global competition and demographic challenges, as well as is one of the preconditions for the change of the economics model (Latvijas ilgtspējīgas attīstības stratēģija līdz 2030.gadam, 2010).

The changing education paradigms have determined the need for new education programmes. Analysing the improvement of education programmes, D.Prets indicates that usually an education programme is considered a driving force that assists in finding the aim of life. The most important task of education programmes, in turn, is liberation, thus ensuring pupils with as many as possible options to choose (Prets, 2000). A.Broks mentions that today we need: new education content, new methods, new education employees and appropriate financial and materially technical resources. (Broks, 2000.)

The home economics subject is one of those that are included in the list of subjects for programmes of primary education. The changes in education paradigms have affected also this subject. The aim of the research is to study the changes in the content of the home economics subject in practice, emphasizing the self-reflection of pupils. In the home economics subject, pupils acquire knowledge and skills typical of creativity oriented education. However each individual determines his or her own ability and wish to act, using the acquired and improved competences in home economics.

## Materials and methods

A pedagogical research was carried out to investigate the changes in the content of the home economics subject in practice. The research was carried out in the city of Jelgava in 2011-2012; pupils of schools of Jelgava, the youth and adults were the ones to participate in the research. The respondents were grouped into three groups: a) pupils acquiring home economics at the moment, i.e., forms 5-9, b)the youth having acquired home economics in about 2000, c) adults having acquired home economics until 1970. Totally, there were 130 respondents. The following research methods were used: investigation of Home Economics programme, questionnaires, observation and discussions. The results have been summarized and the relevant ones are presented graphically using calculations of percentage. The materiality level is determined using Yetes' p-value (Preacher 2001).

The pedagogical research focused on the personal viewpoints of the respondents about home economics during their school years and reflection after several years. Practical life-based conclusions and relation to home economics at school. Observation of changes in home economics content.

## **Results and discussion**

Analysing the home economics programmes in the perspective of years/time, changes not only in the name of the subject, but also in the structure, content and methods can be observed (Līce, 2003a; Lice, 2003b). The topics cover a wide variety. The main accent is put on handicraft, self-service, nutrition, housing maintenance, clothing and differently structuring them, including also accounting (1925-1940), practical workshops (1955-1957), engineering elements, electro-technical work (1960-1980), etc.

The author has elaborated a comparative table regarding the content of programmes, accenting topics related to textiles (Table 1).

The research in home economics programmes reveal that the basic teaching topics included in home economics programmes related to textiles are as follows: textile technologies, treatment of closing, composition (mentioned in options), later ethnography, national applied arts, weaving, textiles in apartment (mentioned as a subtopic). Each topic is influenced by the level of welfare of the particular period of time. For, example, in 20-30ties, manual washing, boiling, rinsing, bluing, drying, rolling of clothing and boiling of soap was accented in treatment of closing and underwear. In 70-80ties – washing of outdoor closing and removal of stains at home and in drycleaner's, washing detergents and equipment, washing machines. From a simple mending of holes to a creative usage of holes as defects for decorating purposes. There are differences observed in the essence of acquiring topics, from a mechanical fulfilment of a practical activity (e.g., prick embroidery) to a wise comprehensive personal development of pupils (creative activity, relation with the living environment, work analysis, self-expression opportunities, etc.). Today acquisition of textile technologies is emphasised together with the human free willingness, choice and understanding. In home economics, the understanding of the pupil about the safety and quality conditions of the human living environment, the ability to creatively involve and solve problems related to that, the ability go gain experience in creative activity is emphasized. The today's importance of home economics is accented also within the World Home Economics Day on March 21 (IFHE, 2012).

Arrangement of kitchen, tidiness.

Diet. Cooking. Table laying,

Decorating of living premises,

Kitchen and kitchen furniture.

Diet. Cooking. Preparation of

menu. Table laying, etiquette.

Decorative plants, treatment.

elements. Electronic works.

Apartment decorating, neighbourhood. Engineering

tidiness. Electric heating devices.

etiquette, serving of food.

Table 1

	<b>Content of programmes of the subject Home Economics</b> (handicraft, household, practical classes, work training)				
Period	Years	Subject	Textile related topics	Other topics	
	1921	Handicraft	Textile technologies: knitting, crochet, embroidery, sewing. Mending and darning.		
	1925	Handicraft	Textile technologies: knitting, crochet, embroidery, sewing. Mending and darning.		
		Home economics	Treatment of kitchen closing and underclosing. Choice of closing and underwear. Treatment of closing.	Arrangement of kitchen. Diet. Cooking. Cleaning of living premises. Soap boiling. Accounting.	
During the times of independence of Latvia	1928, 1930	Handicraft	Textile technologies: knitting, crochet, embroidery, sewing. Mending. Composition (in notes).		
		Home economics	Choice of closing and underwear. Treatment of closing. Treatment of clothing.	Arrangement of kitchen, tidiness. Diet. Cooking. Table laying and etiquette. Cleaning of living premises. Accounting.	
	1935, 1938	Handicraft	Textile technologies: knitting, crochet, embroidery, sewing. Mending. Ribbon weaving. Composition (in notes). Ethnography (in notes).		
		Household	Treatment of closing. Choice and purchase of clothing. Treatment of clothing. Apartment decoration.	Arrangement of kitchen, tidiness. Diet. Cooking. Laying table. Cleaning apartments. Accounting.	
	1941	Handicraft	Textile technologies: knitting, crochet, embroidery, sewing. Mending. Composition (in notes).		
During		Household	Treatment of closing. Choice of clothing. Treatment of clothing.	Arrangement of kitchen, tidiness. Diet. Cooking. Laying table. Cleaning apartment. Accounting.	

Textile technologies: knitting,

and underwear. Textiles for

Textile technologies: Knotting,

Material science. National applied

arts. Ethnography, composition (in

notes). Treatment and cleaning of

outdoor closing. Treatment of closing and underwear. Textiles in

crochet, embroidery, sewing.

premises.

apartment.

embroidery, sewing. Composition.

Ethnography. Treatment of closing

1955,

1957

60-

70ties

70-

80ties

Suring Soviet times

Practical

Practical

classes.

girls.

Work

training. Home

economics

classes in workshops

Classes for

For all of the years, according to the political views and education tasks the home economics subject has been related to real life, it has not existed on its own, but it has existed from the acquisition of self-service skills to a responsible lifestyle, sustainability and improvement of quality of life. Different activities that today can be defined as lifelong learning, have been present always. The Home Economics Seminary of Kaucminde (later called Home Economics Institute of Latvia) has plaid a vital role in ensuring home economics education quality. The establishment and active operation of the International Federation of Home Economics (IFHE) has served as an important accent on an international, emphasizing the today's topicality and importance of home economics in the practical everyday activities.

Home Economics can be clarified by four dimensions or areas of practice:

- as an academic discipline to educate new scholars, to conduct research and to create new knowledge and ways of thinking for professionals and for society;
- as an arena for every day living in households, families and communities for developing human growth potential and human necessities or basic needs to be met;
- as a curriculum area that facilitates students to discover and further develop their own resources and capabilities to be used in their personal life, by directing their professional life, by directing their professional decisions and actions or preparing them for life;
- as a societal arena to influence and develop policy to advocate for individuals, families and communities to achieve empowerment and wellbeing, to utilize transformative practices, and to facilitate sustainable future (IFHE, 2008).

The author is interested in the improvement of the home economics subject for forms 5-9 (today's precise name *Home Economics and Technologies (with the option to choose textiles)*). The research respondents were split in three groups acquiring home economics at different time periods: group 1 - pupils acquiring home economics now, group 2 - the youth acquiring home economics in about 2000, group 3 - adults acquiring home economics until 1970.

The research data shows that respondents of all groups have positive memories as regards home economics (80% pupils; 70% youth; 60% adults). Neutral memories are typical of 5% respondents from group 2 and 13% from group 3 that have acquired home economics some time ago. Option "unpleasant" has been chosen by none of the respondents. Comparing the responses of the three groups of respondents, it can be concluded that respondents form group 1 and group 3 have provided similar positive answers, but those from group 2 – reserved. (Figure 1).

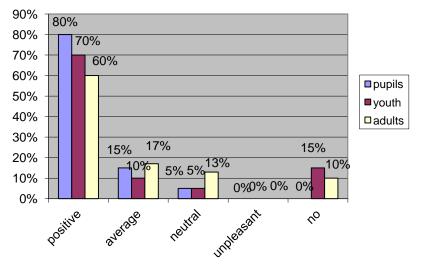


Figure 1. Respondents have memories as regards home economics

Respondents from schools have liked the subject of home economics (82% - group 1, 90% - group 2, 66% - group 3). Only 4% of group 1 and 10% of group 3 partly dislike the subject.

In fact, 93% of group 1, 85% of group2 and 67% of group 3 have stated that it is possible to work creatively during the home economics classes. The position "partly" has been chosen by 7% of group 1, 12% of group 2and 10% of group 3. The position "impossible" has been chosen by none of the

respondents. Checking with  $\chi^2$  criterion with Yates correction there are differences between the groups in creative activities (Yetes' p-value 0.06).

In turn, 78% of group 1, 80% of group 2 and 60% 3 of group 3 marked the possibility to acquire textile technology skills.

At the same time, 85% of group 1, 88% of group 2 and 57% of group 3 indicated to the possibility to acquire cooking skills. "Impossible" was chosen by 15% of the respondents of group 3.

Respondents from group 3 remember the works created by themselves most (82%), from group 2 - works created by themselves, organization of classes and the teacher's personality, but group 1 - works created by themselves, classroom and the working environment during the classes.

As regards "What do you like most in home economics?" the respondents mostly indicate to the possibility to act creatively and create things for themselves. Respondents form group 1 indicate to "specific organization of classes".

Respondents indicate to topics they remember to be learning. The summary of the topics reveals that respondents form group 3 emphasize handicraft, cooking, table laying, electronic works. Respondents form group 2 –handicraft, sewing, cooking, decoration of home, treatment of clothing.

A certainly positive statement was gained by respondents of all groups as regards the question, whether the knowledge and skills acquired in home economics classes are useful in life (92% group 1, 85% group 2, 47% group 3). "Partly" was indicated by 12% of group 2 and 30% of group 3 (Figure 2).

Checking with  $\chi^2$  criterion with Yates correction there are essential differences between the groups in the usefulness of knowledge and skills for live (Yetes' p-value = 0.046).

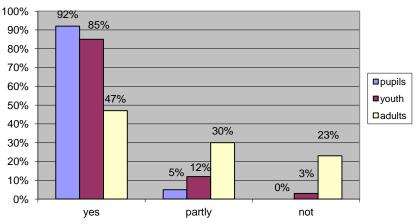


Figure 2. The usefulness of knowledge and skills for live

The viewpoint of the respondents about whether home economics classes should be included in the education programme also in future is confirming towards future. Yes, (100%) – that is the viewpoint of respondents of all groups.

In discussions, respondents form group 3 (adults that have acquired home economics until 1970) reveal that they face matters related to acquiring home economics (children, grandchildren are learning). They are happy that in comparison to their school years now there are creative methodical approaches to this subject, as well as the exposition of content topics has changed. Suggestions from some of the respondents – to pay attention more to the "modern", "topical", instead of just classical and traditional.

## Conclusions

• Home economics programmes have included different topics, emphasising the political views and education tasks of those particular times. Each topic was influenced by the level of welfare of that time, e.g., from a simple mending of holes to a creative usage of holes as defects for decorating purposes.

- Today the understanding of the pupil about the safety and quality conditions of the human living environment, the ability to creatively involve and solve problems related to that, the ability go gain experience in creative activity is emphasized in home economics.
- Respondents of all groups have positive memories as regards home economics (80% pupils; 70% youth; 60% adults).
- Creative activity within home economics classes is recognized by: 93% of today's pupils, 85% of the youth that learned home economics in about 2000, 67% of adults that learned home economics until 1970, confirming that possibilities for creative activity are increasing.
- Respondents most remember the works created by themselves, organization of classes, the teacher's personality, classroom and the working environment during the classes.
- Usage of the acquired skills in life is indicated by: 92% of today's pupils, 85% of the youth that learned home economics in about 2000, 47% of adults that learned home economics until 1970, confirming that the usefulness of the acquired skills is increasing.
- The research data testifies to the fact that changes in the analysis of the home economics subject can be observed among the groups of the respondents.

## References

- 1. Beļickis I. (2000). *Vērtīborientētā mācību stunda* (The Value-oriented lesson). RaKa, Rīga. (In Latvian)
- 2. Broks A. (2000). Izglītības sistemoloģija (Sistem theory of Education). RaKa, Rīga. (In Latvian)
- 3. Fulans M. (1999). *Pārmaiņu spēki. Izglītības reformu virzieni* (Change Forces. Probing the Depth of Educational Reform). Zvaigzne ABC, Rīga, 12.-19.lpp. (In Latvian)
- 4. IFHE (2008). *Home Economics in the 21 century*. [online] [10.01.2012]. Available at http://www.ifhe.org/index.php?eID=tx\_nawsecuredl&u=0&file=fileadmin/user\_upload/redaktio n/Home\_Economics/IFHE\_Position\_Statement\_2008.pdf&t=1328474961&hash=8fe0ca7cfe80 91da2099eed360b8b2d4
- 5. IFHE (2012). *World Home Economics Day 2012*. [online] [10.01.2012]. Available at <u>http://www.ifhe.org/852.html</u>
- 6. Katane I. (2007a). *No ekoloģiskās paradigmas līdz vides modelim izglītības pētniecībā* (From the ecological paradigm to environment model in education research). LLU, Jelgava. (In Latvian)
- 7. Katane I. (2007b). *Paradigmas Latvijas izglītības vidē mūsdienās* (Paradigms in Latvian educational environment nowadays). LLU, Jelgava. (In Latvian)
- Koķe T., Muraškovska I. (2007). Latvija ceļā uz zināšanu sabiedrību: izpratne un izaicinājumi. *Izglītība zināšanu sabiedrības attīstībai Latvijā*. Stratēģiskās analīzes komisija. Zinātniski pētnieciskie raksti (Latvia in the way to knowledge society: understanding and challenges. Education for developing knowledge society in Latvia. Proceedings of Scientific research). Zinātne, Rīga, 121.-141.lpp. [online] [12.11.2011]. Available at <u>http://www.president.lv/images/modules/items/PDF/item 1587 SAK Izglitiba Latvijaa tituli.p</u> df (In Latvian)
- **9.** *Latvian National Development plan 2007-2013* (2006). Ministry of Regional Development and Local Government of the Republic of Latvia. [online] [01.02.2012]. Available at <a href="http://www.nap.lv/upload/nap/national\_development\_plan\_2007-2013\_eng.pdf">http://www.nap.lv/upload/nap/national\_development\_plan\_2007-2013\_eng.pdf</a>
- 10. *Latvijas ilgtspējīgas attīstības stratēģija līdz 2030.gadam* (2010) (Latvian sustainable development strategy to 2030). [online] [05.01.2012]. Available at <a href="http://www.nap.lv/upload/latvija2030\_lv.pdf">http://www.nap.lv/upload/latvija2030\_lv.pdf</a> (In Latvian)
- Lice I. (2003a). Historical Development of the Subject "Home Economics" at General Education Schools in Latvia. Proceedings of International Scientifics Conference "*Rural Environment. Education. Personality*", Latvia University of Agriculture, Jelgava, p.126–131.
- 12. Līce I. (2003b). Mājturības priekšmeta attīstības pirmsākumi. Štarptautiskā konferences "*Pedagoģija: teorija un prakse*" raksti (The beginnings of development Home Ecomonics Subject. Proceedings of the International Conference "Pedagogy: theory and practice"), LiePa, Liepāja. (In Latvian)

- 13. *Mūžizglītības memorands* (2000) (Memorandum on Lifelong Learning). [online] [01.12.2011]. Available at <u>www.tip.edu.lv/faili/Muzizglitibas\_memorands.doc</u> (In Latvian)
- 14. Niglas K. (2001). *Paradigms and methodology in educational research*. Education-line. [online] [05.01.2012]. Available at <u>http://www.leeds.ac.uk/educol/documents/00001840.htm</u>
- 15. *Pedagoģijas terminu skaidrojošā vārdnīca* (2000) (Glossary of Pedagogical terms). Zvaigzne ABC, Rīga, Latvija, 118.lpp. (In Latvian)
- 16. Preacher K.J. (2001). *Calculation for the chi-square test*: An interactive calculation tool for chi-square tests of goodness of fit and independence. [online] [15.01.2012]. Available at <a href="http://www.quantpsy.org/chisq/chisq.htm">http://www.quantpsy.org/chisq/chisq.htm</a>
- 17. Prets D. (2000). *Izglītības programmu pilnveide*. Pedagoga rokasgrāmata (Curriculum planning. A Handbook for Educator). Zvaigzne ABC, Rīga. (In Latvian)
- Rivža B., Krūzmētra M. (2007). Ievads. *Izglītība zināšanu sabiedrības attīstībai Latvijā*. Stratēģiskās analīzes komisija. Zinātniski pētnieciskie raksti (Introduction. Education for developing knowledge society in Latvia. Proceedings of Scientific research). Zinātne, Rīga, 7.-16.lpp. [online] [12.11.2011]. Available at <u>http://www.president.lv/images/modules/items/PDF/item\_1587\_SAK\_Izglitiba\_Latvijaa\_tituli.p</u> <u>df</u> (In Latvian)
- V.Meņšikovs V. (2007). Izglītības paradigmas un sociālais dialogs. *Izglītība zināšanu sabiedrības attīstībai Latvijā*. Stratēģiskās analīzes komisija. Zinātniski pētnieciskie raksti (Education paradigms and social dialogue. Education for developing knowledge society in Latvia. Proceedings of Scientific research). Zinātne, Rīga, 35.-51.lpp. [online] [12.11.2011]. Available at

<u>http://www.president.lv/images/modules/items/PDF/item\_1587\_SAK\_Izglitiba\_Latvijaa\_tituli.p</u> <u>df</u> (In Latvian)

 Zīds O. (2007). Paradigmu maiņa un izglītības attīstības scenāriji Latvijā (Change of paradigms and education development scenarios in Latvia). [online] [01.12.2011]. Available at <u>http://izm.izm.gov.lv/upload\_file/LPS\_uzruna\_Oskars\_Zids.doc</u> (In Latvian).

# THE ROLE OF PHILOSOPHY(IES) IN HOME ECONOMICS

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**Abstract**: This paper explores the role of philosophy(ies) in home economics practice. After defining profession, professional, practice and philosophy, and placing each of these in the home economics context, both the form and the substance of a philosophy are examined, as is their import on the best approach for home economics philosophy.

Keywords: home economics, practice, philosophy, belief system, mission, comparative philosophy

#### Introduction

This paper discusses the role of philosophy(ies) in home economics practice. What is it, why do we need one, what role does it serve, and what should it include? Following the lead of Dahnke and Dreher (2011), this paper reinforces their idea that a discipline focused on practice (as is home economics) has a special responsibility to: (a) rely upon a guiding philosophy, (b) socialize new members into that philosophy, and (c) educate the public about the discipline's focus on praxis, informed by its philosophy. To begin, the paper will generically define each of profession, professional, practice and philosophy, followed with a richer discussion of these concepts within the home economics context. Both the form and the substance of a philosophy are examined, as is their import on the best approach for home economics philosophy.

#### The 4Ps: profession, professional, practice and philosophy

A *profession* provides a set of services that are beneficial to society as a whole (Brown & Paolucci, 1978). A *professional* is a person practicing within a profession, drawing upon general and specialized (expert) knowledge and guided by high standards of professional ethics (Kieren, Vaines & Badir, 1982). *Practice* is identifiable action inherent in a given profession (Dahnke & Dreher, 2011). All professionals should have a *philosophy* that stems from the profession as a whole and is aligned with the latter (Vaines & Wilson, 1986).

A *philosophy* contains ideas about what is important in relation to quality and ethical practice; it is a particular system of beliefs, a set of rules for, and principles of, practice (MacFarland, Cartmel & Nolan, 2010). A philosophy contributes to professionalism because it offers goals, values and attitudes to strive for. As well, a philosophy helps professionals be aware of what they are doing and why (Merriam, 1982). A philosophy is the means by which practitioners obtain, interpret, organize and use information while making decisions and taking actions (Boggs, 1981). The main power of a philosophy is its ability to help practitioners better understand and appreciate what they do and why (Brockett, 1998).

#### Placing 4Ps in home economics context

Brown and Paolucci (1978) make a strong case for home economics holding the "honorific status of profession" (p 6), along four criteria. First, as noted above, home economics provides a set of services beneficial to society as a whole. It focuses on the home for the good of humanity. Second, the provision of these services involves rigorous, responsible intellectual activity, especially moral judgements. As members of a profession, home economists continually engage in scholarly activity focussed on the critique of existing knowledge and on how it matches the evolving needs of individuals and families. The home economics profession faces the challenging reality that everyone lives in some form of home environment and familial arrangement. To offset the tendency for anyone thinking she or he can provide services for individuals and families, the profession strives to build its practice upon human ethics and moral concerns, not just upon technical how-to practice.

Third, home economics is a profession because its members seek to assure others that their work is morally defensible, both in its nature and it performance. To this end, practitioners engage in self reflection and self critique, so they can present themselves and the profession to the public in such a way that society is very clear about what we offer (Brown & Paolucci, 1978; Kieren et al., 1982). This transparency ensures that the profession asks the appropriate questions, poses the correct problems, and identifies the underlying causes of the symptoms with which individuals and families are trying to cope. The result is professional practice and ethical conduct. Finally, because of the level of competence and independent, intellectual thought required to practice in any profession, the scope and purpose of the home economics profession is necessarily limited. However, the complexity of the knowledge and the attendant practice of home economics is not limited; it is profoundly complex and nuanced. Most significantly, although the field has generated specializations to reflect the scope of the profession's mandate, all such areas of expertise, ideally, adhere to the same, agreed-to, philosophy (Brown & Paolucci, 1978; McGregor, 2011), to be discussed later.

In particular, home economics *practice* occurs within a mission-oriented profession rather than discipline-oriented. Mission-oriented practice (also includes education, social work and medicine) builds upon basic processes and applies these processes to provide services that benefit society as whole (e.g., a focus on the home for the good of humanity). Knowledge or knowing is for the sake of *doing something* with the knowledge in one's practice. This is very different from a discipline-oriented field, which views knowledge as an end, or to know for the sake of knowing (Vaines, 1980).

Being a mission-oriented profession means *practitioners* focus on a mission and on valued ends. The full intent of home economics practice is to bring about a change in the person(s) being served by fostering changes in the system of concepts that person uses when interpreting and acting upon the self and the environment. A related intent is to provide services with specific ends that are in the interests of larger society. Such ends are examined and judged by members of the profession in collaboration with those persons served; hence, they are called *valued ends* rather than predetermined or given by some expert (a given end). This is what is meant by being a mission-oriented (valued ends) profession; practitioners need knowledge to accomplish practice with moral overtones (Brown, 1980; McGregor & Gentzler, 2009).

Hand-in-hand with being a mission-oriented profession comes being problem-oriented rather than subject matter-centred. In particular, the problems best suited for home economics are perennial and practical in nature. Perennial means each generation of families faces similar problems, just in different contexts (e.g., the need for shelter, food, clothing, child care). Because we are mission-oriented, focused on valued ends, home economists deal with these enduring problems in socially responsible, and morally defendable, ways. A practical problem is concerned with thoughtful action in situations for which reflective decision-making is required, rather than rote or standardized approaches. What worked before may not be appropriate in the new context. Thus, home economics professionals are required to use judgment based upon an understanding of all the variables of each particular situation (Brown & Paolucci, 1978; Vaines, 1980). It bears repeating that home economists must continue to critique the human condition, which means investigating and denouncing social and individual damages caused by power imbalances in society. Mission-oriented professionals strive for *praxis*; that is, home economists engage with real inequality in society, and then seek to link the insights they gain from their ongoing critique to engage in social and political action (Brown & Paolucci, 1978; McGregor, 2010).

## The role of philosophy(ies)

As explained above, practitioners within the home economics profession are held to the highest ethical and moral standards because their practice impacts the human condition, as shaped by daily life within families and the home. It behoves us to adopt a unifying philosophy of practice that establishes the individual, the family and the home as the primary beneficiaries of the profession. Inculcation of profession-wide philosophies requires rational, practical and inclusive approaches that engage all segments of the profession. Such a strategy contributes to unifying a profession in pursuit of its mission, via a profession-wide dialogue (Maddux et al., 2000). They identify the challenges of trying to adopt a single professional philosophy and model of practice, challenging anyone engaged in a discussion of professional philosophies to remember it is not about what people do, but *why* they do it. The *why* of professional practice in mission-oriented fields is informed by the philosophy(ies).

Cipolle, Strand and Morley (1998) explain that a philosophy of practice helps practitioners make decisions that lead to the formation of ethically consistent practice. This consistency can happen because a philosophy defines the rules, roles, relationships and responsibilities (4Rs) for the practitioner that guide day-to-day and career-long professional practice. Without a professional philosophy, practitioners cannot really know what is motivating them to make such large decisions (with moral overtones). This situation is exacerbated when practitioners' philosophical convictions are subconscious or not clearly articulated (Thomas, 2011; Vaines & Wilson, 1986).

## Components of home economics philosophy(ies) (form and substance)

Salsberry (1994) suggests that a philosophy can have both form and substance (see Thomas, 2011). The *form* of a philosophy comprises three parts: reality (ontology), knowledge (epistemology) and values and ethics (axiology). Reality asks what entities exist within, are fundamental to, the domain of home economics? Knowledge asks by what claims, how, can the basic phenomenon of home economics be known? Ethics asks what does the domain of home economics value? Succinctly, a philosophy is "a set of beliefs about what the basic entities of [a discipline] are, how these entities are known, and what values should guide the discipline" (Salsberry, 1994, p.18). The *form* of philosophy for home economics wants to know what entities are we concerned about, how do we come to know about them, and what values shape our practice (see Figure 1)?

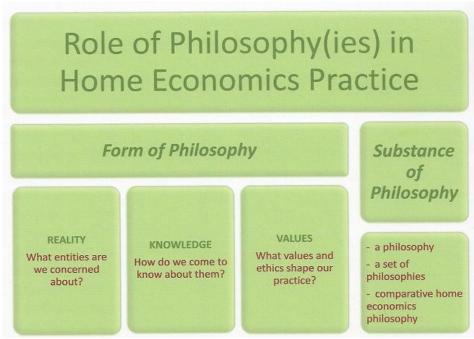


Figure 1 Form and substance of home economics philosophy(ies) (adapted from Salsberry, 1994)

A standard rhetoric exists worldwide, about the raison d'être, *the form*, of home economics as a discipline and a profession. In short, individuals and families (alone and as social institutions) are our focus (reality). We come to know about them by studying their day-to-day lives lived out in their homes and households, shaped by internal and external factors (knowledge). The intent is to improve, optimize and enhance their well-being and quality of life (values and valued ends).

The form of our philosophy is one thing; however, the *substance* of a guiding philosophy to function within that form is quite another (Salsberry, 1994). While the form of a philosophy provides a framework for professional action (clarifies entities, how we know them and through what value lens), the substantive dimension of a philosophy entails conceptual clarification and assessment of various

arguments about reality, knowledge and ethics (Edwards, 1997). Philosophy is supposed to inspect all areas of life and question each practice's fundamental concepts and presumptions (Romano, 2009). The substance of the philosophy of any discipline (home economics included) entails the creation of a unique perspective on the discipline's phenomena of interest (Salsberry). What constitutes the uniqueness of this perspective depends upon whether we think we need *a* philosophy of home economics, a *set* of home economics philosophies, or something else.

### Three approaches to substance of home economics philosophy

A philosophy gives meaning and boundaries to home economics practice. Nonetheless, most home economists have never taken a philosophy course. Romano (2009) notes other disciplines face the same dilemma. Thomas (2011) asserts we do not all have to be philosophers, but we do need to know where we stand in the world, and what we are expected to do as professional practitioners, and to what ethical and moral standards. Because the knowledge base of home economics practice is always changing, to keep pace with the changing face of humanity, it is important to have a solid foundation from which to practice - a philosophy is that foundation; and even that can change over time. One could say that a philosophy is a reflection of the profession's personality, professional culture, beliefs, attitudes and values - its mission. Without question, philosophies affect professional decisions and actions taken in practice (Bryan, 2006).

The title of this paper is the role of *philosophy(ies)* in home economics. For some time, I have been contemplating whether we should say 'a philosophy of home economics' or a set of 'philosoph*ies* of home economics.' This query is shared by both Kaija Turkki (Finland) and Donna Pendergast (Australia), fellow home economics philosophers. They both argue that philosophies of home economics (plural) is a term that respects the diversity of what constitutes home economics as it is practiced around the world (personal communication). Edwards (1997) expresses similar concern for the nursing profession, pondering which is most relevant, *a* philosophy of nursing or philosophy of nursing. If the latter, then "any one specific philosophy of nursing can only be an instance of the subject-area denoted by the expression 'philosophy of nursing'" (p 1090).

Perhaps the answer is a third approach, a *comparative home economics philosophy*. A comparative approach makes comparisons across various time frames, regions or cultures as something develops. This approach would challenge the assumption that how home economics evolved in one country is the way it evolved around the world. Niehof (2011), from the Netherlands, explains that the profession of home economics was formalized during the Lake Placid conferences in North America (1899-1909), but it then evolved along different paths around the world as it grew in importance. As the profession expanded around the world, so did notions of what constitutes a philosophy of home economics practice. Indeed, home economics in different countries now hold different conceptualizations of what constitutes home economics (Whalen, Posti-Ahokas, & Collins 2009).

To illustrate further, following on the heels of the very influential American monograph about how to define home economics philosophy (Brown & Paolucci, 1978), Brown, a renowned American home economics philosopher, wrote three tomes about home economics philosophy in United States, especially volume three (Brown, 1993). But, the North American notion of what counts as home economics philosophy is not used worldwide. In my epilogue for a book on home economics practice in Scandinavia (Tuomi–Gröhn, 2008), I note that (a) North American home economists draw on Habermas (German philosopher), (b) European and Scandinavian home economists draw on Merleau-Ponty, Husserl and Heidegger (German and French), (c) and Japanese home economists draw on Bollnow (German). Given this wide range of philosophical inspirations, it stands to reason that what is considered a philosophical framework for home economics practice would differ around the world. This diversity became self-evident in a profile of different vignettes of home economics philosophies in five regions of the world (McGregor, 2009) (see Table 1).

#### Table 1

# Evidence of diversity of opinions about what counts as home economics philosophy, from five different global regions (McGregor, 2009)

- embrace new notions of what it means to be an expert (expert novice and integral specialist);
- consider the idea of having fun and taking pleasure while practising on the margins, and of resisting normalization (carnival and carnivalesque);
- move far beyond interdisciplinary to the energizing spaces of transdisciplinarity transformation and integral thinking;
- embrace celebratory, reflective leadership with a focus on human action (ethical, spiritual and authentic) and human as well as intellectual capital, rather than conventional management and transactional leadership;
- choose to focus on the human condition, basic human needs and qualities of living rather than well-being and quality of life;
- use new conceptualizations of *the home* (the house as a place for humanity and the ascendency of human beings rather than just shelter for individual families);
- consider the concepts of *wholesight* and *being-in-the-world*;
- conceive our body of knowledge as agent-centered rather than subject- or content -centered (facilitated through communities of practice instead of separate specializations);
- show a newfound respect for everyday life, especially how people make sense and meaning within their daily life;
- adopt different notions of what competent practice looks like (predicated on sustainability of culture and society, personal and social responsibility, and a *willingness* to live and manage together);
- accept the idea that everyone on earth has a right to basic *education for life competence* (a rights-based approach) so as to foster the *culture of family life*;
- move away from integrated practice to integral practice (shift from balance and harmony to a respect for the emergent and healthy *tensions* that hold things together as they continually evolve in an attempt to see order emerging in chaos);
- position the profession beyond patriarchy; and,
- consider the restoration of humanity by viewing home economics as a discipline for human protection focused on the soundness and fullness of human life and existential hope (based on the assumption that the destruction of private life leads to the destruction of the conditions of humans in general).

#### Discussion

"The broad overall goal of home economics is to provide benefits for mankind [sic] through the delivery of a wide range of human services" (Kieren et al., 1982, p 118). We are making decisions about problems facing humanity that may not have solutions in our lifetime. For this reason, it is imperative that we have some sort of philosophical underpinnings to guide our practice. "Home economics is subject to a continuous process of change and redefinition" (Wahlen et al., 2009, p. 34). In the face of this change, we must continually examine and redefine our philosophical underpinnings.

The process of conversing about philosophy(ies) of home economics can be empowering because it provides an opportunity to reflect upon, and identify, what is meaningful within our professional practice (Kinsella, 2001). We have to ask ourselves if we are still in agreement on the long-standing form of our philosophy, reiterated here: Individuals and families (alone and as social institutions) (reality) are our focus. We come to know about them by studying their day-to-day lives lived out in their homes and households, shaped by internal and external factors (knowledge). The intent is to improve, optimize and enhance their well-being and quality of life (valued ends). This form was supported by a particular substance of philosophy: interdisciplinarity; systems, eco and human ecosystems thinking; a global perspective; social change theory; practical problem solving; moral values reasoning; and, system of actions, all focused on the concepts of well-being and quality of life (McGregor, Pendergast, Seniuk, Eghan & Engberg, 2008).

Do we want to redefine our focus, how we came to know about it, and from what value set? What would this reframing look like? We could shift our focus to a study of individuals and families and their art of everyday living and how this helps the home become the protector of humanity. We could shift our focus to the human family and study how the home performs as the arena that shapes the human condition. We could shift our focus to the family as a social institution, and study how various

societies respect this institution as the cornerstone of the future of humanity. Each of these scenarios, and others, represents a different *form* of philosophy than we have now: a different notion of reality (which entity is our focus), a different way of knowing about this reality, and from which set of values.

The *substance* of our philosophy(ies) would change profoundly if we shifted *forms* of philosophy (i.e., different reality, knowledge and values). And, if the substance of our philosophical base changes, our ideologies, research methodologies/paradigms, theories, methods, results reporting and applications to professional practice (pedagogy, policy, human service delivery) would all change as well (McGregor et al., 2008). A philosophy of practice is a changing and dynamic entity, reflecting changes in the profession, its practitioners, individuals and families, and the world at large. What appeared the right thing to do in years past may change as new understandings emerge and as the world becomes more complex (Kinsella, 2001).

### Conclusion

Back to the title of this paper. Philosophy(ies) play a profound role in our practice as a missionoriented profession focused on practical, perennial problems that span generations. "A fully articulated professional philosophy of practice can serve as a grounding point [an anchor] from which to examine professional activities and actions" (Kinsella, 2001, p.1). *Are we still doing the right thing, given what humanity needs to survive and thrive, through the family and the home*? This is always our anchor, our guiding question.

The time is right for a world-wide discussion about what would serve us best: *a* philosophy of home economics, philosophies of home economics, or comparative home economics philosophy. First, an agreed-to world-wide professional philosophy may "mean a more sustainable profession on a global scale, a deeper assurance of consistency in practice, a stronger ability to ride the currents of change, and a far-reaching sense of solidarity" (McGregor & MacCleave, 2007, p 15). This would be *a* philosophy of home economics. Second, after holding an international dialogue about the issue, we might agree that each region will embrace a context-specific home economics philosophy. What works in North America as *substantive* philosophy may not be appropriate for Asia, Africa, Europe, Oceania and vice versa. Third, we may have an international dialogue and agree to adopt a comparative home economics philosophy that respects the global diversity of home economics practice, perhaps with an agreed-to form (see Figure 1), but with different substance, depending upon the context.

We are not isolated islands. We belong to the worldwide profession of home economics, with members practicing in almost 200 countries. Given this contextual professional mosaic, we can anticipate a philosophical mosaic as well. A true professional will choose to identify with the profession, but she or he also will need to draw strength from the philosophical identity and culture of the profession (McGregor, 2006; McGregor & Goldsmith, 2010). Given our moral responsibility to humanity, home economics must continue to (a) articulate a philosophy(ies) of practice, (b) engage in collective dialogue about this practice dynamic, and (c) work together to create practice that is consistent with the valued ends of the profession.

### References

- 1. Boggs D. L. (1981). Philosophies At Issue. In B. W. Kreitlow (Ed.), *Examining Controversies in Adult Education*, p 1-10. Jossey-Bass, San Francisco, California.
- 2. Brockett R. G. (Ed.). (1998). *Ethical Issues in Adult Education*. Columbia University Press, New York.
- 3. Brown M. M. (1980). *What Is Home Economics Education?* [Microfiche]. University Department of Vocational and Technical Education, Minneapolis, Minnesota.
- 4. Brown M. M. (1993). *Philosophical Studies of Home Economics in the United States: Basic Ideas by Which Home Economists Understand Themselves (Volume 3)*. Michigan State University, East Lansing, Michigan.
- 5. Brown M., Paolucci B. (1978). Home Economics: A Definition. AAFCS, Washington, DC.
- 6. Bryan C. (2006). *Professional Philosophy*. [online] [28.11.2011]. Available at <u>http://www.utm.edu/departments/hhp/docs/Philosophy.doc</u>
- 7. Cipolle R. J, Strand L. M., Morley P. C. (1998). A New Professional Practice. In Cipolle R. J., Strand L. M., Morley P. C., eds. *Pharmaceutical Care Practice*. McGraw-Hill, New York, pp1-35.

- 8. Dahnke D., Dreher H. (2011). *Philosophy of Science in Nursing Practice*. Springer, New York.
- 9. Edwards S. D. (1997). What is Philosophy of Nursing? *Journal of Advanced Nursing*, Vol. 25, p 1089-1093.
- 10. Kieren D., Vaines E., Badir D. (1984). *The Home Economist as a Helping Professional*. Frye Publishing, Winnipeg, Manitoba.
- 11. Kinsella E. A. (2001). Examining Your Professional Philosophy, *Occupational Therapy Now*, Vol. 3(3), p 10-12.
- 12. MacFarland K., Cartmel J., Nolan A. (2010). *Early Childhood Care and Education Leadership Modules - Module 3 Philosophy*. [online] [28.11.2011]. Available at <u>http://www.ecceleadership.org.au/node/14</u>
- Maddux M., Dong B., Miller W., Nelson K., Raebel M., Raehl, C., Smith, W. (2000). A Vision of Pharmacy's Future Roles, Responsibilities, and Manpower Needs in the United States, *Pharmacotherapy*, Vol. 20(8), p 991-1020.
- 14. McGregor S. L. T. (2005). Professionalism in the New World Order, *Journal of Family and Consumer Sciences*, Vol. 97(3), p 12-14.
- 15. McGregor S. L.T. (2006). Transformative Practice. Kappa Omicron Nu, East Lansing, Michigan.
- McGregor S. L. T. (2009). International Conceptualizations of a 21<sup>st</sup> Century Vision of the Profession, *Kappa Omicron Nu FORUM*, Vol. 18(1)<u>http://www.kon.org/archives/forum/18-1/mcgregor.html</u>
- 17. McGregor S. L. T. (2010). Locating the Human Condition Concept Within Home Economics. [online] [28.11.2011]. Available at
  - http://www.consultmcgregor.com/documents/publications/human-condition-monograph-2010.pdf
- McGregor S. L. T. (2011). Home Economics as an Integrated, Holistic System: Revisiting Bubolz and Sontag's 1988 Human Ecology Approach, *International Journal of Consumer Studies*, Vol. 35(1), p 26-34.
- 19. McGregor S. L. T., Gentzler Y. (2009). Preserving Integrity: University Program Changes, *International Journal of Home Economics*, Vol. 2(1), p 15-29.
- 20. McGregor S. L. T., Goldsmith E. (2010). Defogging the Professional, Philosophical Mirror, *International Journal of Home Economics*, Vol. 3(2), p 16-24.
- McGregor S. L. T., MacCleave A. (2007). Analysis to Determine Canadian, American, and Australian Agreement about Home Economics/family and Consumer Sciences Professional Competency Domains, *Kappa Omicron Nu FORUM*, Vol. 17(2), http://www.kon.org/archives/forum/17-2/home economics professional competency domains.html
- McGregor S. L. T., Pendergast D., Seniuk E., Eghan F., Engberg L. (2008). Choosing Our Future: Ideologies Matter in the Home Economics Profession, *International Journal of Home Economics*, Vol. 1(1), p 48-68.
- 23. Merriam S. B. (1982). Some Thoughts on the Relationship Between Theory and Practice, *New Directions for Continuing Education, Vol.* 15, p 87-91.
- 24. Niehof A. (2011). Conceptualizing the Household as an Object of Study, *International Journal of Consumer Studies*, Vol. 35, p 488-497.
- Romano C. (2009, November 15). We Need 'Philosophy of Journalism', *The Chronicle of Higher Education*. [online] [28.11.2011]. Available at <u>http://chronicle.com/article/We-Need-Philosophy-of/49119</u>
- 26. Salsberry P. J. (1994). A Philosophy of Nursing. In J. Kikuchi and H. Simmons (Eds), *Developing A Philosophy of Nursing* (p 11-19). London, Sage.
- 27. Thomas W. R. (2011). *Why Does Anyone Need a Philosophy*? [online] [28.11.2011]. Available at <u>http://www.atlassociety.org/why\_does\_anyone\_need\_philosophy</u>
- 28. Tuomi–Gröhn T. (Ed.) (2008). *Reinventing Art of Everyday Making*. Peter Lang, Frankfurt, Germany.
- 29. Vaines E. (1980). Home Economics: A Definition. A Summary of the Brown and Paolucci Paper and Some Implications for Home Economics in Canada. *Canadian Home Economics Journal*, Vol. 30(2), p 111-114.
- 30. Vaines E., Wilson S. (1986). Professional Action: Using the Theoretic Framework of Practice, *Canadian Home Economics Journal*, Vol. 36(4), p 153-157.
- 31. Wahlen S., Posti-Ahokas H., Collins E. (2009). Linking the Loop: Voicing Dimensions of Home Economics. *International Journal of Home Economics*, Vol. 2(2), p 32-47.

# INNOVATION IN SCHOOL SUBJECT HOME ECONOMICS

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**Abstract:** Research objective- explains and substantiates the necessity of innovative learning process and introducing in subject "Home economics and technologies", improving the content of learning process and updating the development of life quality comprehension, what can be achieved by acquiring a variety of handicraft and modern technology. In the article compared the Ministry developed subject programs and the author's programs of A.Pridāne parts "Technological creativity and practical application to the human habitats to improve" and "Product ideas, ideas generation, presentation".

**Keywords:** innovative and creative learning process, life quality, the subject "Home economics and technology"

### Introduction

The century of new technologies influences our every day life- as well as in communication, as work, as spending free time. 21 century challenge and task is to create such approach that is involving and interesting, easy to adapt and it is in conformity with out-of- school life of young people (Inovatīvas ierosmes izglītībā, 2010), it creates young people's natural inquisitiveness and succeeds their effective activities in future. Teachers and scientists constantly think about, what knowledge are necessary and how the teaching process is organized more effectively in order that corresponds to social process, development of society in future, when student finishes the school and solve arisen life problems independently (Žogla, 2002).

As well as the education documents of World, Europe, and Latvia give the references to teachers, that nowadays educational process must be innovative and creative, sort of that allows student to have a good knowledge of real life, prepares them for cognitive, estimative, practical, creative action in future.

In pedagogical and psychological literature the notion creativity means as the personality features as the process, action, (Damberga, 2005, 49; Mikelsone, 2000), as independence, nonstandard thinking (Katane, 2005, 61). With the word creativity is understood the transformation of acquired information and experience in new quality (Katane, 2005, 63), as a mean for solving problems, as an adventure not being afraid of making mistakes (Piaget, 1969, Liegeniece, 1999).

Notion innovative-derivative from English word innovation- novelty, novation, urgent, significant (Pedagoģijas terminu skaidrojošā vārdnīca, 2000, 248) it is related as to novelties of learning process and content, as to creative approach of learning process, as usage of new non-traditional learning materials methods, and ways as establishing and using the latest information and communication technologies in education. The notion is used to define creative action and its results and products. Innovation is, flow of knowledge, it is creation process of knowledge and applying process of it, likewise - subject, thing, new idea, technical manner, approach, method, etc.; developed creatively, with the help of strange methods, means.

Considers that, the bases of innovative process are cooperation, talking, communication and sharing the ideas that can turn into successful result (Neimanis, 2011). Krivoručenko (Криворученко, 2008) explains the notion innovation as significant novation, improvement, for example: method, technique, practice, product, service with value-added, that is connected with its establishment and realization in life. On the bases of given explanations in English dictionaries Stabulnieks (2009) indicates that innovation must be understood as creation of new things, it denotes the process, where something new is created or old things are replaced with new ones (Oxford English Dictionary, 2006).

I have to admit that, that innovation in all fields of life develops faster than it is possible to do improvements in education. Therefore teacher himself must improve the professional qualification and critically estimate the action in context of new demands. In order to insure innovative learning process teacher must be: knowing, creative, able to generate and create new ideas, design and model situations and practical actions that is directed to student's personality development and needs.

From one hand, in its professional experience it makes teacher to use new ideas, methods, shapes, techniques, as well as teachers have to have good knowledge and be able to use effectively the latest information and communication technologies.

On the other hand appropriate learning and supplementary aids, made up adapted digital learning recourses and methodologies, and freely accessible equipment in classes are necessary for introducing the innovations in practice.

The usage of IKT in subject "Home economics and technologies" is very diverse. It is as acquiring and selection of the information about resources and services the ability of using them in browsers as well as the observation of the ways of technologies and developing methods in video materials, and carried out different calculations and data processing, making presentations as well as preparation of learning tasks, fulfilment and testing, just like correspondence and consultations. I have to admit that the usage of IKT is many times wider but unfortunately teachers and students do not have appropriate knowledge and skills.

### Materials and methods

The author has more than twenty years doing research on Home economic education in Latvia and abroad. In recent years, particularly in the context of educational reform and topical subject "Home Economics and Technology" place of primary education. This paper analyzes the collected part of the theoretical knowledge of modern and innovative content of the necessity to implement. Compared Ministry of Education developed subject programs and the author's programs parts of A.Pridāne "Technological creativity and practical application of human habitats to improve" and "Product ideas, idea generation, design". This basic difference is included in the curriculum and diverse contemporary craft technological learning opportunities.

Methods used: the scientific study of literature, analysis and evaluation, experience reflection, content analysis.

### **Results and discussion**

Effective changes in education demands versatile approach in order to change completely learning process (Dynarski, Agodini, Heaviside, Novak, 2007). Nowadays innovative approach in didactics means pre-emptive teaching which prepares person for future self education necessity, it gives necessary skills to distinguish and solve problems and the alternatives for solving them (Lanka, 2005). Consider Innovations in didactics are not only modernizations of learning process, improvement of material technical and informative resources, but also improvement of syllabus, approach of new progressive learning methods and learning styles, that creates critical, creative thinking, approach of social and practical skills and development of competences (Kuzņecova, 2010).

Innovative learning process demands creative and involving work-out and implementation of learning content, where students are active participants, researchers and discoverers (Brunner, 2000). Students and teachers relations change during teaching and learning process- they are directed to cooperation and partnership, teachers and students desire for continuous improvements that promotes students development of ability and experience (Brigmane, 2010).

As to the meaning of innovative and reflexive approach in education and purposeful planning of pedagogical experience (Inovatīvas ierosmes izglītībā, 2010), there is emphasized to look over the content of learning process, the conformity according to propounded demands contemporary education. It must be competitive internationally open, interdisciplinary (Klasons, 2010), studied in ethical and cultural, science and technologies, social and economical aspects (Delors, 2001, 26). The content of learning must be pointed to future *Learning Futures* (Hamlyn, 2012), and brought closer to life reality, where acquiring knowledge must be less theoretical but really practically used (Inovatīvas skolu sistēmas struktūras īstenošanas izaicinājumi un iespējas, 2010). Amonašvili Š. points out to it

expressing the attitude, that students action is connected with his every day self awareness (Амонашвили, 2001). It is promoted by learning that is not only connected with his future interests but also with its present life interests that are clear and acceptable.

Besides learning process should be student centred, thus stimulating interest about learning subject, motivating students to participate in learning process more actively, to distinguish the sense of life action, learn to solve problem situations, improve the problem solving skills such as (ability to persuade, influence, make position, to motivate his choice and point of view), choose suitable information and adapt to his own needs. (Gardner, 2011; Hamlyn, 2011; Frondeville, 2011) Emphasize must be both to clarifying questions what? Where? When? but to comprehension searching answers to questions why? how?. It means to change the accent in content of learning process from approaching the volumes of facts and information to analytical-in order to develop processing present information, evaluating, discussing and argumentation skills.

The usage of appropriate methods and techniques are just as significant component of innovative learning process, that demands from student more independent and more active learning, problem approach, stimulates student to go deep into the content of learning, stimulates his creativity and development (individual and group projects) as well as promotes the ability to use their knowledge in real life situations; the necessity e able to judge independently, to be responsible, ability predict changes and be able to adapt to them. (Šmite, 2004). The special place is shown to project methods, that promote critical thinking and (Šmite, 2004; Rubene, 2004; Frondeville, 2011; De Bono, 1996a, 1996b), that helps student to show analytical abilities to get rid of traditional way of thinking. This is the way how students can learn to transform present ideas with its new combinations, to see the things and process in the best advantage, as a result find the best way of solving the problem to carry out appropriate action for the goal (Garleja, 2007, Inovatīva domāšana, 2007, 9), be ready to take a risk, to make mistakes, in practical work understand creating process. The acquirement of thus organized learning purposeful action of the teacher despite of subject student learns, gives opportunity to develop students individuality, experience, skills, it promotes formation of many sided personality (Izglītības likums, 1999).

People in knowledge based society should be able to plan and develop their life with responsibility- be able to manage with present resources in the interest of itself and society, be competitive, live successfully in language and ethnic diverse society. All these questions are vital and they are solved in subject "Home economics and technologies".

The content and title of home education has changed in many years time. It was influenced by social economical situation in society the society raised demands for education. Appreciating the demands, aims, tasks, and content propounded for home economics education, it was concluded that it was connected with handicrafts approach for long time and educating students for labour forgetting about the importance of subject in the development of students' personality (Pridāne, 2009, 61).

Nowadays Home economics education is complicated subject with various tendencies of action and technologies. It is based on research of economical, social and cultural field and directed to social and responsibly developed personality. It must be taken into consideration in Latvia as well considering the subject as essential component of secondary education for boys and girls, drawing attention to acquiring necessary competences for every day life provision.

Innovations in the content of subject "Home economics and technologies" in Latvia, means giving individual the ability learn to live in rapidly changing society, developing understanding, the present interaction of processes in society and home economics, acquiring knowledge and understanding about peoples habitat environment, evaluation of self abilities and using them for the improvement of life quality. It must be based on the recent quotations of home economics and mastery diverse technologies used in household. There for the author in her promotion paper (Pridāne, 2009) based on principals of human pedagogy where student and his needs and interests are in the centre of attention, has motivated the urgency of life quality and its meaning of comprehension in subject "Home economics and technologies" and further in whole life.

When solving the question about person's lifestyle and living conditions, the choice of food, the food culture, the health and hygiene, the provision of peoples working capacity, finances, planning and the economical supply of home economics, the market of production and services, resources and

goods consumption, the relation with finances institutions, cooperation and relation in family, ethic and art in family life and work, handworks and crafts, it is possible to motivate personal home economics role in people life, gradually developing all-round comprehension about life quality and its reaching abilities and ways.

In order to realize the life quality principle in home economics education in primary school standard of primary education (Noteikumi par valsts standartu pamatizglītībā un pamatizglītības mācību priekšmetu standartiem, 2006) in subject "Home economics and technologies" with the choice in textile technologies, the sample offered by the Ministry of education were evaluated (Mācību priekšmetu programmu paraugi pamatskolai <u>Mājturība un tehnoloģijas 5.–9. klasei</u> ar izvēli tekstila tehnoloģijās, 2006) as well as the author program for form 5-9 was developed, reflecting the achieved results of the content- the comprehension of life quality (Pridāne, 2009, 79, 125).

The Standard of subject "Home economics and technologies" shows that 75 % from amount of studies should be mastered in creative work, practical approach, emphasizing the initiative and responsibility of personality. The demands mentioned above are fulfilled using creative, problem exercises and business like games, that are close to real life and demand analytical thinking, enquiring the situation, searching the connections, joining the present and new experience. For example, working with imaginative budget, students work out, and successful model for planning finances, this is realized while student begins its independent life. The ability to solve the tasks like this and similar to this make student to realize its needs, forms the comprehension of life quality, motivation, and necessity to reach it.

Table 1

# **Creative and practical usage of technologies in development of people habitant environment** (Pridāne, 2009)

Form	Number of hours 10	Questions to acquire	Number of hours 40	The result to achieve						
59.	2	Folk art traditions, the usage nowadays. The historical development of technologies. The abilities to use them in producing various things Materials and instruments, the calculation of amount. Technical interpretation.	8	usage abilities of technologies has been introduced. The latest, modern technologies are acquired. Does exercises, evaluates its skills in them with making samples, Reads and writes in technical interpretation, makes drawings. Has comprehension about the calculation on amount of material. Selects and uses appropriate materials, determines the quality. Has knowledge and introduces with obtaining sources of information about definite technology. Chooses and uses appropriate tools takes into consideration the rules of safety. Distinguish and evaluates subjects and value of ethnography, handicrafts, applied art, as the part of nation culture heritage and the usage abilities in nowadays interior. Comprehends the national costumes of Latvia's region, the distinctive features and diversity, and used producing technologies. Distinguish the ability how to use the features of national costume in modern clothe.						

Besides in home economics education allocated great role to creativity and creative work. As a result of acquired program the Standard of primary education (Noteikumi par valsts standartu pamatizglītībā un pamatizglītības mācību priekšmetu standartiem, 2006) there are shown acquiring knowledge and skills for students has an opportunity to freely to choose technologies. They are reflected in author programme sections "Creative and practical usage of technologies in improvement

of peoples' habitant environment (Table 1) and "Goods, ideas, the development of ideas and design" (Table 2).

In the sample of programme (Mācību priekšmetu programmu paraugi pamatskolai <u>Mājturība un</u> <u>tehnoloģijas 5.–9. klasei</u> ar izvēli tekstila tehnoloģijās, 2006) included mainly traditional handicraft technologies (knitting, crocheting, weaving, embroidering, sewing) (Table 3).

Table 2

Form	Number of hour 5	Questions to acquire	Number of hour 10	The result to achieve
5 9.	1	The usage of article, abilities of technical solutions Modelling principles of drafts and compositions. The abilities of using ethnographical elements, stylization. Description of technical interpretation and draught.	2	offers, motivates and realizes the his ideas for making or decorating, combining different technologies and materials Search and selects articles, model, appropriate materials, technologies using different sources of information. Evaluates accessible resources, its abilities. Makes drafts or drawings and composition for chosen object. Evaluates the work, time put in, material and quality of produced object.

### Article ideas, creation of ideas, decoration (Pridāne, 2009)

However contemporary and innovative content can be formed, if teachers offer and student choose acquire contemporary technologies that corresponds students interest and technologies that corresponds the trend, for example: painting of glass and silk, floristic, macramé, pearl technique, and others (Table 4). Acquisition of new technologies gives students opportunity to:

- use them spending qualitative free time- creative self-expression (making things in order to create persona image, for development of self environment quality);
- think about using new technologies in private enterprise, further career.

Table 3

### Acquisition of textile technologies using the sample of syllabus in subject "Home economics and technologies"

(Mācību priekšmetu programmu paraugi pamatskolai <u>Mājturība un tehnoloģijas 5.–9. klasei</u> ar izvēli tekstila tehnoloģijās 2006)

variants/form	Form 5.		Form 6.		Form 7.			Form 8.			Form 9.				
	1.	2.	3.	1.	2.	3.	1.	2.	3.	1.	2	3	1.	2.	3.
crochet	16	18	16								16		12		12
Knitting				26	20	18		20	14	20		20			
Embroidering	18	16	18			16	16		12		18				
Batik, fabric printing								10	6	10					
weaving							12				12	10			
sewing		12	12			12	18		14	16		16	18		16
appliqué work	12				16										
macramé				10										8	
paper plastics				10	10										
combined works								16					18	20	20

#### Table 4

The Curriculum "Home Economics and Technology" with a selection of textile technology and
the author's program included handicraft forms of learning technology comparison 5th - 9. form
(Pridāne, 2009)

	he ways of	The sample of programme	Possible variations in author's					
technologies			programm					
	Embroidering	colourful works, clean works, planking embroidering	embroidering with laces, pearls					
gies	Crochet	form crochet, lace crochet	crochet with fork, Irish technique, crochet from untraditional materials (rope, pearls, texture yarn and others.)					
traditional technologies	Knitting	lace knitting, round knitting (socks, mittens, hats)	Knitting from untraditional materials (laces, pearls, texture yarn ect.). loom knitting					
ional	Weaving	its weaving (book marks, ribbons)	gobelin tapestry, using untraditional materials (pearls, nature materials ect.)					
tradit	Sewing	clothe production of interior things appliqué work, textile mosaic	embroidering with sewing machine (clothe, decoration of interior objects)					
	Batik	adornment of things or production	adornment of interior objects and clothe					
	Fabric	of fabric, using traditional cold, hot	or production using cold, hot batik, wax					
	printing	batik, printing	batik, marblebatik					
gies	Painting on a glass, silk		adornment of crockery and interior crochet objects, silk painting					
olo	Jevelery		making of décor and decorations					
techn	Macramé		making laces, book plates, telephone purse					
ional	Felting		making decors and decorations and other objects.					
untraditional technologies	Dekupage		adornment and decoration of objects, furniture, renovating of interior components.					

In the year 2010, 2011 the author as senior expert was involved in ESF project "Further education of compulsory education teachers". In the content of this project there was formed and approached teachers' programme model of further education *the comprehension development of life quality in home economics and technologies in household*. The aim of project is to increases competences of home economics and technologies, household teachers in order to provide contemporary and innovative learning process. Develop training and methodological materials, as well as part of the author's programs are given during the learning program ("ESF projekta "Vispārējās izglītības pedagogu tālākizglītība" pedagogu tālākizglītības programmu un kursu izdales materiālu izstrāde un aprobācija. "Mājturības un tehnoloģiju, mājsaimniecības skolotāju Profesionālo un pedagoģisko kompetenču pilnveide", 2011) for teachers, as well as access to programs available on the Web. Author ideas, teaching materials and programme are expected to meet with approval and will be used in schools of Latvia.

### Conclusions

- The changes in education are directed to young people needs, stimulating their natural thirst of knowledge, promotion of successful action in future. The content of subject must be turned to the student rouse the interest and motivate student to participate more actively in learning process, to distinguish the sense of life action. It must be competitive internationally open, interdisciplinary.
- Innovations in education are related to the innovations in learning process and content, creative approach to learning process, with using new, unconventional learning materials,

methods, and ways, implementing and using the latest information and communication technologies in learning process.

- Innovative and creative process in subject "Home economics and technologies" provides:
  - introducing the principles of life quality in content of subject;
  - acquiring modern technologies appropriate to student interests and trends;
  - the possibilities of using technologies for student self-expression and further career;
  - creative, promoting critical thinking, problem solving and project methods are used.

### References

- Brigmane B. (2010). Sabiedrības pārmaiņu iezīme- inovatīvs mācību saturs vispārizglītojošajā skolā. 5 starptautiskā zinātniskā konference "*Teorija un prakse mūsdienu sabiedrības izglītībā*" (Feature of social change - an innovative learning content comprehensive school. 5<sup>th</sup> International Conference "Theory and practice of modern public education"). RPIVA, Rīga, Latvija 54.- 60. lpp. (In Latvian)
- 2. Brunner E. (2000). *Vides izglītība* (Environmental Education). Zviedrija, Vekše: Danaburgas grafiskā tipogrāfija, tulkojusi S. Elsberga sadarbībā ar fondu Zviedriju turēsim sakoptu, 70. lpp. (In Latvian)
- Damberga L. (2005). Radošums un ķermeņa tehnikas. Starptautisko zinātnisko konferenču "Domāšanas attīstība un izglītība" raksti 2001.- 2004. (Creativity and body techniques. Proceedings of international scientific conferences "Development of thinking and education"). Dobeles Bērnu un jauniešu centrs, LSPA, Rīga, Latvija, 98 lpp. (In Latvian)
- **4.** De Bono E. (1996a). *Serious Creativity. Using the Power of Lateral Thinking to Create New Ideas.* Harper Collins Business, London, p. 338.
- 5. De Bono E.(1996b). *Teach Yourself to Think*. Penguin Books, London, p.254.
- 6. Delors Ž. (2001). *Mācīšanās ir zelts*. UNESCO Starptautiskais ziņojums (Learning is gold). UNESCO World Report). 255 lpp. (In Latvian)
- 7. Dynarski M., Agodini R., Heaviside S., Novak T. (2007). *Effectiveness of reading and mathematics software products: Findings from three first student cohort.* Washington, DC, U.S. Department of Education, Institute of Education Sciences.
- 8. "ESF projekta "Vispārējās izglītības pedagogu tālākizglītība" pedagogu tālākizglītības programmu un kursu izdales materiālu izstrāde un aprobācija. "Mājturības un tehnoloģiju, mājsaimniecības skolotāju Profesionālo un pedagoģisko kompetenču pilnveide"(2011) ("ESF Project "Further education of general education classroom teachers" design and testing the handouts of teacher training programs and courses. "Improvement of professional skills and competences of Home Economics and Technology teachers"), [online] [41.06.2011]. Available at: <a href="http://visc.gov.lv/talakizglitiba/vispizgl/dokumenti/20110127\_esf\_projekta\_istenosana.pdf">http://visc.gov.lv/talakizglitiba/vispizgl/dokumenti/20110127\_esf\_projekta\_istenosana.pdf</a> (In Latvian)
- 9. Frondeville T. *Ten Steps to Better Student Engagement* (2011). [online] [21.12.2011]. Available at: <u>www.edutopia.org/project-learning-te</u>
- 10. Garleja R. (2007). Darba organizācija un psiholoģija (Organization of work and psychology).
- 1. Raka, Rīga, Latvija, 200 lpp. (In Latvian)
- 11. Gardner H. (2011). *Restructuring to Promote Learning in America's Schools*. Videoconference #4, Multidimensional Assessment: Strategies for the Classroom.[online] [21.12.2011]. Available at: <a href="http://www.ncrel.org/.../students/.../at600.ht">www.ncrel.org/.../students/.../at600.ht</a>.
- 12. Hamlyn P. (2011). *Learning Futures: increasing meaningful student engagement*. [online] [21.12.2011]. Available at: <u>www.learningfutures.org/</u>
- 13. *Inovatīva domāšana* (2007) (Innovative thinking). Harvard Business Review. Lietišķās informācijas dienests, Rīga, 199 lpp. (In Latvian)
- 14. *Inovatīvas ierosmes izglītībā* (2010). Valsts prezidenta un SAK apaļā galda diskusija. SAK, 7.04. (In Latvian)
- 15. *Inovatīvas skolu sistēmas struktūras īstenošanas izaicinājumi un iespējas* (2010) (Innovative school system, based on implementation challenges and opportunities). SAK pētījuma rezultātu ziņojums. SIA Analītisko pētījumu un stratēģiju laboratorija, Rīga, Latvija. (In Latvian)
- 16. Izglītības likums (1999) (Education Law) LR, IZM, Rīga, Latvija, 64 lpp, (In Latvian)
- 17. Katane I. (2005). *Radošums kā pamatprincips mūsdienu izglītībā*. Starptautisko zinātnisko konferenču "*Domāšanas attīstība un izglītība*" raksti 2001.-2004. (Creativity as a fundamental principle of modern education. Proceedings of international scientific conferences "Development of

thinking and education"). LSPA, TA "Domāšanas attīstība" Dobeles Bērnu un jauniešu centrs, Rīga, Latvia, 98 lpp. (In Latvian)

- 18. Klasons G. Inovatīvas skolu sistēmas struktūras īstenošanas izaicinājumi un iespējas (Innovative school system, based on implementation challenges and opportunities). SIA "Analītisko pētījumu un stratēģiju laboratorija" SIA "Microsoft Latvia". [online] [21.12.2011]. Available at: http://www.microsoft.com/education/teachingwithtechnology/storox.aspx#section2 (In Latvian)
- Kuzņecova A. (2010). Inovācijas augstskolu didaktikā: to loma izglītības un sporta speciālistu profesionālās kompetences veidošanā un attīstībā. (Innovation in university didactics: their role in education and sport of professional competence in establishing and developing). Proceedings of the Scientific Journal *The Humanities and Social Science*, Technical University, Riga, Latvia, Vol.17., p. 63.- 69. (In Latvian)
- **20.** Lanka A. (2005). *Mūsdienu didaktika postmodernisma kontekstā*. Zinātniskie raksti Humanitārās un sociālās zinātnes (Nowadays didactics in context of postmodernism). Scientific Proceedings of Humanities and Social Sciences RTU, Rīga, Latvija, 8. sēr., 7.-13. lpp. (In Latvian)
- 21. Lieģeniece D. (1999). *Kopveseluma pieeja audzināšanā* (Holistic approach to child rearing). Raka, Rīga, Latvija. (In Latvian)
- Mācību priekšmetu programmu paraugi pamatskolai <u>Mājturība un tehnoloģijas 5.–9. klasei</u> ar izvēli tekstila tehnoloģijās (2006) (Subject programs for primary school Home Economics and Technology 5<sup>th</sup> -9<sup>th</sup> Class the selection of textile technology) <u>Mājturība un tehnoloģijas 5.–9. klasei</u> [online]
   [2.01.2012]. Available at:

<u>http://visc.gov.lv/saturs/vispizgl/programmas/pamskolai/majtur\_5\_9\_tekstils.pdf</u> (In Latvian)
 23. Miķelsone I. (2000). Radošums- būtiska personības vērtība. Zinātnisko rakstu krājums *Radoša personība* (Creativity as relevant personal value. Scientific Collection of Creative Personality)

- *personība* (Creativity as relevant personal value. Scientific Collection of Creative Personality). Vārti, Rīga, Latvija, Nr.1, 256.- 258. lpp. (In Latvian)
- 24. Neimanis M. 2011. *Izglītības inovāciju forums Laba skola* (Education Innovation Forum A Good School). [online] [12.03.2011]. Available at: blogi.nozare.lv/matissneimanis/page/3/ (In Latvian)
- 25. Noteikumi par valsts standartu pamatizglītībā un pamatizglītības mācību priekšmetu standartiem. Mājturība un tehnoloģijas. Mācību priekšmeta standarts 1.- 9. klasei (2006) (Terms of national standards in primary education and primary education curriculum. Home Economics and Technology). The subject standard 1<sup>st</sup> – 9<sup>th</sup> class. (<u>18.pielikums</u>). [online] [2.02.2009]. Available at: www.likumi.lv/doc.php?id=150407 (In Latvian)
- 26. Oxford English Dictionary. 2006. by Catherine Soanes. Oxford University Press, p. 1056.
- 27. Pedagoģijas terminu skaidrojošā vārdnīca (2000) (Glossary of Pedagogical terms). Zvaigzne ABC, Rīga, Latvija, 68.lpp. (In Latvian)
- 28. Piaget J. (1969). *Nachahmung. Spiel und Traum*. (Imitācija. Spēlēt un sapņot.) Stuttgart. (In German).
- 29. Pridāne A. (2009). *Dzīves kvalitātes principa īstenošana mājturības izglītībā pamatskolā* Promocijas darbs (Implementation of the Principle of Life Quality in Home Economics Education at Basic School, Doctoral Thesis). Jelgava, Latvija, 160 lpp. (In Latvian)
- 30. Rubene Z. (2004). *Kritiskā domāšana studiju procesā* (Critical thinking in the study process). LU, Akadēmiskais apgāds, Rīga, Latvija, 246 lpp. (In Latvian)
- Stabulnieks J. Kā latviski raksturot procesu nevis gala rezultātu? Komersanta vēstnesis (How it is possible to characterize the process rather than outcome in Latvian? Merchant Herald) Nr.9 (15) [online] [21.12.2011]. Available at: <u>http://www1.kvestnesis.lv/?menu=doc&id=129261</u> (In Latvian)
- 32. Šmite A. (2004). *Izglītības iestādes vadība*. I daļa, II daļa (Management of Educational Institution. Part I, Part II). Raka, Rīga, Latvija, 254 lpp., 264 lpp. (In Latvian)
- 33. The Merriam-Webster Dictionary (1974). Pocket Books, p. 848.
- 34. Žogla I. (2002). Didaktika mainīgajā izglītībā: salīdzinošs pētījums (Didactics of changing education: a comparative study). ATEE Spring University, Decade of Reforms: Achievements, Challenges, Problems. Edited materials of the international conference. Riga, SIA Izglītības soļi, p. 35-42. (In Latvian)
- 35. Амонашвили Ш. (2001). Размишления о гуманной педагогике (Reflections on humanitarian pedagogy). Издательский дом Ш, Амонашвили, Москва, Россиа, 496 с. ( In Russian)
- 36. Криворученко В. К. (2008). Диссертации- важнейший элемент инновационности (Theses an essential element of innovation). Россия. [online] [21.12.2011]. Available at: www.law.edu.ru/doc/document.asp?docID=1304995 (In Russian)

# THE SUSTAINABILITY OF THE STUDY PROGRAMMES HOME ENVIRONMENT AND INFORMATICS IN EDUCATION AND HOME ENVIRONMENT AND VISUAL ART IN EDUCATION IN THE LATVIAN UNIVERSITY OF AGRICULTURE

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Abstract: The set of features of the sustainability for Professional Bachelor's Study Program Home Environment and Informatics in Education and the Professional Bachelor's Study Program Home Environment and Visual Art in Education are presented in the paper. The aim of paper is analysis of sustainability - set of features that provide the ability to maintain a continuous process of progress for the Professional Bachelor's Study Programmes Home Environment and Informatics in Education and Home Environment and Visual Art in Education. The set of features of sustainability for the study programmes Home Environment and Informatics in Education and Home Environment and Visual Art in Education: the availability of higher education to all, particularly — to the youth from rural areas; the increase of the proportion of new educators in Zemgale region; the ensuring of the obtaining of two qualifications of a teacher and the transition to the contextual education; the facilitation of the strengthening of students' belonging to the cultural space of Latvia and the development of creative society; the facilitation of the cooperation with the educational institutions of the national and regional significance of all levels of Latvia, the EU and other countries; the development and take measures for maintaining the same number of students; the intensify at its maximum the development of applications for different projects, including the international projects, and to utilize efficiently the allocated means for the methodological, informative and material, and technical provision of the study program; the improve the cooperation among the Faculties, Institutes and Departments of the Latvia University of Agriculture for the implementation of the program are presented in the paper.

**Keywords:** sustainability, the Professional Bachelor's Study Programme *Home Environment and Informatics in Education*, the Professional Bachelor's Study Programme *Home Environment and Visual Art in Education*.

### Introduction

The strategy for the sustainable development of Latvia until the year 2030 (Latvijas ilgtspējīgas attīstības stratēģija līdz 2030. gadam, 2010) recommends the preparation of teachers for teaching more than one subject that might be one of the solutions, particularly — in rural areas, in order not to close down the schools, to form grades from the pupils of different age where the teachers need to possess the totality of different skills. This practice has been successfully implemented at the Institute of Education and Home Economics of the Faculty of Engineering at the Latvia University of Agriculture (LLU) already since 2003 in the Professional Bachelor's Study Program *Home Environment and Informatics in Education* and since 2006 — in the Professional Bachelor's Study Program *Home Environment and Environment and Visual Art in Education*.

Sustainable development requires analysis of each study program. Sustainability is a set of features that provide the ability to maintain a continuous process of progress (Pedagoģijas terminu skaidrojošā vārdnīca, 2000).

### Materials and methods

The sustainable development analysis of the Professional Bachelor's Study Program *Home Environment and Informatics in Education* and the Professional Bachelor's Study Program *Home Environment and Visual Art in Education* using the following materials:

- The strategy for the sustainable development of Latvia until the year 2030 (Latvijas ilgtspējīgas attīstības stratēģija līdz 2030. gadam, 2010)
- LLU Strategy of Activities for the Planning Cycle 2010-2016 (LLU Strategy of Activities for the Planning Cycle 2010-2016, 2009)

• Zemgale Planning Regional Development Programme for 2008-2014 (Zemgale Planning Regional Development Programme for 2008-2014, 2007)

### **Results and discussion**

LLU Strategy of Activities for the Planning Cycle 2010-2016 (LLU Strategy of Activities for the Planning Cycle 2010-2016, 2009) was approved by LLU Senate on June 09, 2009 is with the following Keywords referring to the Programme: social science (according to Latvian Council of Sciences the direction of education belongs to it), direction of pedagogy, intellectual potential and culture, rural areas, National University and Zemgale region.

Future vision of the Programme is in line with the vision of Institute of Education and Home Economics and Latvian University of Agriculture (LLU), and Zemgale Planning Region (Zemgale Planning Regional Development Programme for 2008-2014, 2007). The main Keywords of the three visions are: intellectual potential and culture, cooperation of institutions, all levels education, rural areas. LLU Mission: to develop the intellectual potential for sustainable future of Latvia and especially rural areas. LLU vision: to become a modern, internationally recognized and prestige university, taking part in the common European academic education and science space.

The set of features that provide the ability to maintain long-term of the study programmes *Home Environment and Informatics in Education* and *Home Environment and Visual Art in Education*:

### 1. The availability of higher education to all, particularly — to the youth from rural areas.

Already now the vast majority (more than 68%) of the students studying in the study programs Home Environment and Informatics in Education and Home Environment and Visual Art in Education are from the rural regions. The emphasis in the programs Home Environment and Informatics in Education and Home Environment and Visual Art in Education is put on the rural youth's opportunities to study at the higher education institution without the expensive living costs characteristic to life in Riga; with the orientation towards the return of young people from rural areas to their home. After the graduation from the Latvia University of Agriculture, most of the students return home in order to work at rural schools, rural institutions or they continue their studies at the Latvia University of Agriculture. The people from rural educational institutions already for many years are used that there are study programs of pedagogy at the Latvia University of Agriculture with their academic potential. They count on an opportunity to study at the Latvia University of Agriculture, because for many of them it is advantageous territorially and economically (for the comparison: the tuition fee for the academic year 2010/2011 for the studies in the study programs Home Environment and Informatics in Education and Home Environment and Visual Art in Education at the Latvia University of Agriculture: full-time studies - LVL 800, part-time studies - LVL 534; in the analogous study program Teacher, Teacher of Home Economics and Technologies) Household, implemented in Riga, at the University of Latvia: full-time studies - LVL 1050, part-time studies -LVL 700. The students and graduates express very positive views about the atmosphere at the Institute of Education and Home Economics, the content and improvement dynamics of the study programs, the assistance provided by the academic staff, the opportunities for performing scientific research, the material basis. Within the study courses of visual art, included in the study program, the emphasis is put on the materials available to students (and later — to pupils at schools), instead of using expensive materials to be used by the professionals of art; the emphasis is also put on the design results that could be achieved be means of the available materials.

In conformity with the goal of the action policy of the Latvia University of Agriculture: To ensure the quality of studies corresponding to the status of the university of national and regional significance; this quality would enable to prepare the competitive specialists for the labour market of Latvia and international labour market, as well as, taking into account the developmental demand of Jelgava City and Zemgale region in the fields of pedagogy science.

### 2. The increase of the proportion of new educators in Zemgale region.

One of the priorities of Zemgale Planning Region is the facilitation of educational development in the territory (The Developmental Program of Zemgale Planning Region for 2008 - 2014, 2007). There is a wide network of educational institutions in Zemgale region. At the beginning of the study-year 2010/2011 there were 120 institutions of general comprehensive education in Zemgale, including 3

primary schools, 62 elementary schools, 46 secondary schools, 9 special schools for children with mental and physical problems, as well as 10 institutions of vocational education. There are also different interest related educational institutions in the city of amalgamated municipalities — 26 art schools and educational centres for children and youth, and there are 28 adult education centres (AEC) in the cities and centres of amalgamated municipalities of Zemgale region. The topical problems for Zemgale region are aging of educators and small proportion of new educators.

In conformity with the goal of the action policy of the Latvia University of Agriculture: to develop the Latvia University of Agriculture as a centre of national and regional significance for the sustainable development of education, science and culture.

# 3. The ensuring of the obtaining of two qualifications of a teacher and the transition to the contextual education.

In conformity with the strategy for the sustainable development of Latvia for the period until the year 2030 (Latvijas ilgtspējīgas attīstības stratēģija līdz 2030. gadam, 2010) regarding the recommendation of the prior long-term action trend *paradigm changes in education* of the preparation of teachers for teaching more than one school subject, the transition to the contextual education and the change of a teacher's profession in order a teacher would be not only the teacher of his/her school subject, but a diverse, talented personality, assisting, encouraging, connecting different fields, cooperating, advising and organizing.

# 4. The facilitation of the strengthening of students' belonging to the cultural space of Latvia and the development of creative society.

In conformity with the strategy for the sustainable development of Latvia for the period until the year 2030 (Latvijas ilgtspējīgas attīstības stratēģija līdz 2030. gadam, 2010) regarding the recommendation of the prior long-term action trend *development of cultural space*, the study programs *Home Environment and Informatics in Education* and *Home Environment and Visual Art in Education* facilitate the development, preservation and enrichment of the cultural space of Latvia, the strengthening of students' belonging to the cultural space of Latvia and the development of creative society, which is ensured by the following study modules: Culture and Art, Fundamentals of Design, Studies of Visual Art.

# 5. The facilitation of the cooperation with the educational institutions of the national and regional significance of all levels of Latvia, the EU and other countries.

To continue the cooperation with all higher education institutions of Latvia, EU and other countries in relation to seminars, conferences, exchange of experience, guest-lectures, continuing education and the evaluation of the study results of study program.

Active participation in the work of international educational organizations: Association for Teacher Education in Europe; International Organization for Science and Technology Education; International Federation of Home Economics.

Organization of international scientific conferences and publishing of conference proceedings in pedagogy.

Latvia University of Agriculture is the third largest higher education institution in Latvia and **the only one** in Zemgale region. There is a high proportion of students from Zemgale region in the study programs *Home Environment and Informatics in Education* and *Home Environment and Visual Art in Education*. Thanks to the study programs *Home Environment and Informatics in Education* and *Home Environment and Visual Art in Education*, the Latvia University of Agriculture is able to cooperate with the schools of Zemgale regarding ensuring the places of practice for students (more than a half of students choose to have practice at the schools of Zemgale region) and the organization of pupils annual regional scientific research conferences and the evaluation of pupils works according to sections. The regulations of the Ministry of Education and Science provide that the above mentioned activities shall be organized by the regional higher education institution, and the Latvia University of Agriculture and the Institute of Education and Home Economics have the successful experience of previous years regarding the organization of the pupils' scientific research conferences and the evaluation of pupils' works.

### 6. The development and take measures for maintaining the same number of students.

- The active participation of students, studying in the study programs *Home Environment and Informatics in Education* and *Home Environment and Visual Art in Education*, in the activities of open days at the Latvia University of Agriculture and other promotional campaigns will be a positive contribution to the attraction of new students.
- The transition to distance learning and e-studies within the part-time studies.
- The use of e-study MOODLE environment at its maximum for the purpose of full-time studies.

7. The intensify at its maximum the development of applications for different projects, including the international projects, and to utilize efficiently the allocated means for the methodological, informative and material, and technical provision of the study program.

# 8. The improve the cooperation among the Faculties, Institutes and Departments of the Latvia University of Agriculture for the implementation of the program.

The material base for the implementation of the study programs *Home Environment and Informatics in Education* and *Home Environment and Visual Art in Education* is fundamental and the only one in Latvia, where there is a close cooperation among the Faculties through the students collaboration with the specialist of the respective field. The Latvia University of Agriculture is the only institution, having such a diverse material base (renovated and modernized laboratories) that ensures the opportunities for the studies of all themes regarding home economics and household:

- the module *Nutrition* of the content of study program is being acquired under the guidance of the academic staff from the Faculty of Food Technology in a modern kitchen (equipment from Germany) and in specialized room for the studies of table manners;
- *Technology of Textiles* at the workshops of textile materials, weaving, sewing, manual training (at the Institute of Education and Home Economics);
- Applied Engineering: Woodworking in the modern laboratories of the Faculty of Forestry;
- *Applied Engineering: Metal Working and Electrical Engineering* at the workshops of metal working and in the laboratories of electrical engineering of the Faculty of Engineering;
- *Fundamentals of Design* at the workshops of visual art (at the Institute of Education and Home Economics);
- *Computer Studies* are acquired under the guidance of professional academic staff of the Faculty of Information Technologies at the well-equipped computer laboratories and in a specially equipped computer room at the Institute of Education and Home Economics;
- within the project of ERDF, during the academic year 2011/2012, there are two laboratories being equipped at the Institute of Education and Home Economics: laboratory of visual art and laboratory of psychology.

There has been a library developed at the Institute of Education and Home Economics that is available for students and has a wide range of bibliographic items in pedagogy, psychology and other fields related to education.

There is a permanent exhibition hall, where it is possible to see the results of the course works; the exhibition hall is being visited also by the teachers of home economics, household and visual art in order to find new ideas for their pedagogical activities.

Such a material base is only at the Latvia University of Agriculture, because only the Latvia University of Agriculture has the Faculty of Food Technology, the Faculty of Forestry and the Faculty of Engineering with their diverse workshops for home economics, where the academic staff can fully educate the qualitative teachers of Home Economics and teachers of Technologies/Household and ensure the interdisciplinary links.

### Conclusions

The main tasks of sustainable functioning of the study programmes *Home Environment and Informatics in Education* and *Home Environment and Visual Art in Education*:

- to facilitate the availability of higher education to all, particularly to the youth from rural areas;
- to increase the proportion of new educators in Zemgale region;
- to continue ensuring the obtaining of two qualifications of a teacher and the transition to the contextual education;
- to facilitate the strengthening of students' belonging to the cultural space of Latvia and the development of creative society;
- to facilitate the cooperation with the educational institutions of the national and regional significance of all levels of Latvia, the EU and other countries;
- to develop and take measures for maintaining the same number of students;
- to intensify at its maximum the development of applications for different projects, including the international projects, and to utilize efficiently the allocated means for the methodological, informative and material, and technical provision of the study program;
- to continue to improve the cooperation among the Faculties, Institutes and Departments of the Latvia University of Agriculture for the implementation of the program.

### References

- 1. *Latvijas ilgstpējīgas attīstības stratēģija līdz 2030. gadam* (2010) (The strategy for the sustainable development of Latvia until the year 2030). [online] [10.01.2012]. Available at <u>www.latvija2030.lv</u> (In Latvian)
- LLU Strategy of Activities for the Planning Cycle 2010-2016 (2009). [online] [10.01.2012]. Available at <u>http://www.llu.lv/getfile.php?id=29532</u> (In English)
- Zemgale Planning Regional Development Programme for 2008-2014 (2007). [online] [10.01.2012]. Available at <u>http://www.zemgale.lv/index.php/attstbas-plnoana/plnoanasdokumenti</u> (In English)
- 4. *Pedagoģijas terminu skaidrojošā vārdnīca* (2000) (Glossary of Pedagogical terms). Zvaigzne ABC, Rīga, p. 66. (In Latvian)

# NON-FORMAL EDUCATION AS PROMOTER OF LIFE QUALITY FOR RURAL WOMEN

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**Abstract:** One of European Union states imperatives in education is a society of knowledge; each man has to become a well-educated, harmonious and all-around developed member of society. To realize these aims, well-balanced development of education environment in cities as well as in rural areas has to be provided. In this aspect, it is relevant to solve problems of education quality of offer and demand of non-formal education activities which are especially current for rural people, accordingly to find solutions how to make non - formal education more available to rural people in order to improve their life quality. The aim of this work is to update and to deepen comprehension of non-formal education for rural woman.

**Keywords:** non-formal education, life quality, rural women.

### Introduction

Nowadays life quality is not only the subject of philosophical discussions or someone's personal problem. More often life quality becomes in a centre of society attention in connection with development processes, tasks of economical growth and structure of politics. Latvian Sustainable Development Strategy till year 2030 defines rising of life quality and availability of qualitative education as one of priority directions for sustainable action (Latvijas ilgtspējīgas attīstības stratēģija, 2008).

Education has to ensure conditions and has to give opportunities to each people bar none to perfect own talents, to implement potencies of creation, including responsibility of own life and consummation of personal aims, as well as future of society (Delor, 1996). In 21<sup>st</sup> century in the world, also in Latvia occur so fast changes in technologies' development and modernization that there causes necessity to improve and to develop peoples' own knowledge and skills in non-stop regime. Education system and its availability has big role in the development of people knowledge. Formal education not always are able to satisfy individual desires and needs as well as to react rapidly to changes of technologies and social skills, therefore people more often achieve necessary knowledge and skills out of formal education by attending different courses, seminars, conferences. In non-stop process of lifelong learning non-formal education gets greater role.

The aim of this work is to update and to deepen comprehension of non-formal education as promoter of life quality, to lay stress on necessity to provide adult non-formal education for rural woman.

The aim of this article is concretized in following tasks:

- to clarify importance of education to promote life quality;
- to find out availability of non-formal education related with interests to rural woman in Zemgale region;
- to give suggestions for persons involved in non-formal education.

### Materials and methods

Theoretical basis of work is formed on cognitions of foreign and Latvian researchers about interpretations of conception *life quality* (Ness, Pridāne, Tisenkopfs, Tavlor, Oertl, Petersen, Calvert, Henderson, Bullinger, Batzdorfer, Subetto, and Ohlsen etc.) and potentialities and individualities of non-formal education for adults (La Belle, Coombs, Ahmed, Jarvis, Kravale, Knowles, Rogers). Results of other researches *Life quality in Latvia* (Dzīves kvalitāte Latvijā, 2005) and *Access to lifelong learning and opportunities to educate in Latvia* (Mūžizglītības pieejamība un iespējas izglītoties Latvijā, 2006) are used and analyzed in this research.

In practical research about different aspects of life quality and non-formal education inquiry was used, experience analyzes in project ECOART, reflection of authors' individual experience and mathematic data processing.

Project "ECOART- a creative, ecological use of natural resources for decoration of the closest environment ", implemented by financing of Latvia-Lithuania cross border cooperation program 2007-2013, between Latvia University of Agriculture and Lithuania Siauliai University. Project is directed to availability of culture and education of interests for rural people of Zemgale region as well as improvement of their life quality. In the frames of this project practical seminars are organized that encourage people on creative action and ecological usage of resources to decorate closest environment (for example, psychology of colors, creative work of paper and leather, sand compositions, flower carpets and nature object etc.).

Questionnaire was carried out in the project seminar groups without limits of time in attendance of research authors to provide correct understanding of questions. Time for this questionnaire was during May till November 2011.

88 respondents of Zemgale rural regions and 28 respondents of Lithuania Radivilski and Siauliai rural regions took part in research; they all were participants of the project ECOART seminar groups - women in the age of 20-76. Main spheres of occupation are cleaner, tailor, teacher, nanny, seller, secretary, housewife etc.

Since seminar participants form Latvia part represented rural areas of Jelgava territory, information about offer of non-formal education activities was gained from those municipals.

### **Results and discussion**

Conception *life quality* is researched and defined by different authors and from different points of view. It is difficult to give one definition.

F.Tavlor considers that life quality is connected only with health problems (by Pridāne, 2007) or, it can't be measured, but only evaluated when person is sick (Oertl, 2003). C.Petersen (Bullinger M., Schmidt S., Petersen C., 2002) agree that it isn't measurable, bet it can be affected by factors: health, social activities and mode of life, equality of possibilities and possibilities to educate, employment and environment.

B.Calvert and H.Henderson (Henderson H., Lickerman J., Flynn P. 2000) are worked out criteria of life quality; they are called *Quality of life Indicators*, which contains factors mentioned above plus spheres of safety and law.

M.Bullinger (Bullinger, Kirhberger, Steinbüchel, 1993) defined life quality as construction, which includes the psychical feeling of comfort, mood, social relations and ability to functionate in daily life.

A. Ness (Ness, 1999) believes that life quality express how a person evaluates his life, how feels and perceives world around him. There is an opinion in the literature that person's life quality is defined by his likeness, because it has essential importance in private life and in search for employment (Batzdorfer, Klippel, Sörensen, 2004).

*Life quality* in sociology means "...straight non-measurable level of person's satisfaction of needs, especially of health, situation of environment, possibilities to educate, level of democratization and social protect ability" (Socioloģijas skaidrojošā vārdnīca, 1997, 44).

After results of theoretical research by pedagogical doctor A.Pridane (Pridāne, 2007) *life quality* can be expressed with following criteria's:

- 1. economical indicators, which characterizes level of life and provides concrete person's material needs;
- 2. social and cultural needs directed to person's development;
- 3. system of mental values which's forms basics of personality's life (target, significance).

In the frames of this research most preferable is characteristic by A.Subetto (Cy6erro, 1994) life quality as system of mental, material, social-cultural, ecological and demographic life components, which includes quality of person, quality of education, quality of culture and quality of life environment (ecology), social, economical and political organization of society. In this system level of person's innate power realization expresses, his creative significance of life.

Life quality depends of person's creative approach to life, legal capacity and practical action. Legal capacity has substantially effect on education, social derivation and upbringing. It changes in process of life and it is affected on person's experience. Important role in realization of legal capacity takes person's self-confidence, reflection and willpower (Tisenkopfs, 2006).

After analyze of scientific literature authors were developed following figure (Figure 1) of life quality criteria where criteria are grouped in three basic groups- welfare, security and sustainability. These criteria were on base of this research questionnaire to clear up respondents understanding about life quality and education as promoter of life quality.

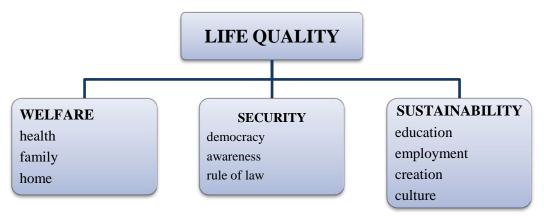


Figure 1. Criteria and indexes of life quality

There is cleared up that answers of respondents in this practical research didn't give unitary explanation, but largely they have something in common to Subetto definition. The respondent's answers were "life quality is...- "...person's satisfaction with self and others", "persons' own needs for life, hobby and good job", "acquirement of new skills", "job, health, money", "satisfaction of persons' skills, abilities and own interests", "good relations in family, private house, job that affords pleasure, one rule for all", "mental, social and economical welfare", "arranged environment, health, job and family".

Most of life quality researchers (Petersen, Pridāne, Calvert, Henderson, Subetto and Tisenkopfs etc.) stress education or possibilities to educate as one of the most essential indicator of life quality. Education is such human activity sphere, which straight effects life quality and it is considered as process and tool to personality's development. Promoting of every person's different aspects of life quality is brought toward as aim of the development in the long-term conceptual document "Latvian development model: Man of the first place". It is achievable with active usage of obtained knowledge potential of population. Basic resource to gain life quality level of developed states is **people knowledge and wisdom,** skilled and purposeful usage of them (Latvijas izaugsmes modelis, 2005).

The same conlusion appears more than once in the results of strategic plans and analyzes of Latvia development: knowledge is significant resource of Latvia to gain high and sustainable results of life quality development (Karnītis, 2004).

B.Calvert and H.Henderson (Henderson, Lickerman, Flynn, 2000) accentuates that knowledge is wide approved as notable factor of economical production and it is a ground of people rights.

On education as a significant indicator of life quality indicates consideration that education level is one of the criteria in methodic to define the human development index, which is researched by United Nations Development Program (UNDP) and which defines level of life quality of world's nations (Latvijas izaugsmes modelis, 2005).

It is researched there that people with higher education level in majority states of European Union (EU) are more pleased with life (Bela, 2006). One of the reasons can be that better education gives better opportunity to find well-paid job. The other reason, probably, more educated people are able to use their skills and potentialities more efficiently to administer progression of their lives.

In this research there was to clarified importance of 10 different indicators of life quality in personal life of respondents. The gained results indicate that in the view of respondents all indicators are important for life quality, but by rank amount (where number 1 has the highest estimation) education is only on 5<sup>th</sup> place for Latvians and 6<sup>th</sup> place for Lithuanian respondents. Also by research of Strategic Analysis Commission (SAK) (Latvijas izaugsmes modelis, 2005) in 2004 education as priority in Latvia was only for 8% of people.

Table 1

respondents in Jelgava region											
spheres	rank amount	place									
home	207	3									
family	172	1									
health	189	2									
education	230	5									
culture	219	4									
employment	239	6									
creation	265	8									
democracy	269	10									
rule of law	253	7									
awarness	263	9									

Importance of life quality indicators for Latvian and Lithuanian
respondents' point of view

	respondentsin Siauliai an Radivilski regions										
	rank										
spheres	amount	place									
home	57	5									
family	41	1									
health	46	2									
education	60	6									
culture	50	4									
employment	47	3									
creation	69	8									
democracy	74	9									
rule of law	66	7									
awarness	75	10									

Rural people as important indicators of their life quality mentioned family  $(1^{st} \text{ place})$ , health  $(2^{nd} \text{ place})$ , home and culture  $(3^{rd} \text{ place})$  in the frames of this research. Also the research *Life quality in Latvia* (Dzīves kvalitāte Latvijā, 2005) displays those basic spheres were people are satisfied- family, health, educational and home; spheres which they feel to be able to affect (Bela, 2006).

In nowadays in education environment is accepted to divide formal, non-formal and informal education. The object of this research is role of non-formal education in the promotion of life quality; therefore all attention in this research is devoted to interpretations of non-formal education.

Non-formal education is instrument for person's non-stop improvement and development, where education activities are organized out of formal education system, which works as vision enlargement of target group; is more objective and directed to individual's education, attached to specific situation and environment (A Memorandum on Lifelong Learning, 2000).

In international environment rising of non-formal education conception is connected with alternative offer of education- education programs, which is less volume, realized in shorter time and costs are lower (Tight, 2003). At first, term *non-formal education* mostly was used in the context of adult education to accentuate education process in which adults can participate out of formal education system (La Belle, 1982; Jarvis, 2002). In the long run target group of non-formal education becomes people in every age in the context of lifelong learning. Non-formal education is "...any organized, systematic educated action, which occurs out of formal education system to provide diversity of education and availability to different groups of people, int.al. adults and children" (Coombs, Ahmed, 1974, 8). In nowadays non-formal education is referable to all age groups- it's aims, content and process results from needs and interests of each target group. In dictionary of pedagogic terms it is defined as "out of formal education system organized educated action; interest related education, courses, as well as professional perfection without achieving new grade of education. In these actions are not put forward formal requirements" (Pedagoģijas terminu vārdnīca, 2000, 178).

Non-formal education is dynamic, varied educated system, which hasn't regulative department from state (Kravale, 2006). The main features are:

• ability to adapt and flexibility in relation to participants, process, methods, content, aim and tasks- all those can be changed that depends on learners demands, motivation and set targets;

• availability- closeness to work place or home and possibility to act immediately, it means, ability to use gained knowledge with less resources.

In non-formal education have to stress that it is based on individual experience, self- activity and gives possibilities to gain knowledge and skills which can't be accessed in the frames of formal education- activities are more extensive than in formal education.

Non-formal education provides:

- useful and thoughtful spend of free time;
- creative self-expression, development of talents, self-development;
- socialization;
- acquirement of professional skills;
- career planning;
- supplementing of knowledge and skills gained in formal education.

These achievements in non-formal education are related to indicators of life quality mentioned by C.Petersen (Bullinger, Schmidt, Petersen, 2002). He admits that life quality can't be measured directly, but indicators have most important meaning in it, for example:

- possibility to participate in different activities;
- equality of potentialities and possibilities to get educated;
- labour service and labour safety;
- freedom of persons development;
- possibilities to spend free time;
- condition of environment;
- and others.

Part of non-formal education which in past were called as interest related education for adults are discussed in this article. Term *interest related education* is explained as "*implementation of persons individual education needs and desires on owns age and gained education*" (Izglītības attīstības koncepcija 2007.-2013.gadam). Interest related education also is possibilities thoughtfully to spend a free time when each can improve their own interests- learn dancing or singing, to play some instrument, to paint, to engage in sport or something else. Activities of non-formal education can be different hobby groups, interest related clubs, elective courses or courses/seminars in the frames of project etc. It is related to Ohlsen (by Pridāne, 2007), that life quality embraces persons desire to participate in social life as individuality.

Traditionally interest related education in Latvia is related to education of children and youth, less to education of adults. In researches and documents about adult education following terms are used "non-formal education" and "with job related non-formal education", which indicates that there exist non-formal education which is not related with job but in which interest related education for adults could fit in. This part of adults' non-formal education which is object of this research; authors called as *interest related non-formal education*.

In 2007 in non-formal education in Latvia 30.7 % population were involved, comparatively in formal education 5.4%, which is almost 6 times less. In non-formal education participate in total 369.6 thousand of population, 227.8 thousands of it were women (36.2 % of all woman). If from this amount take away 186.8 thousand of women which were involved with job related non-formal education, we can suppose that 41 thousand of women were involved in interest related education (Pieaugušo izglītība - 2007.gada apsekojuma dati).

Partly the structure of non-formal education is planned and fitted accordingly to states national requirements, because non-formal education has to be most flexible system of education, which is able to offer maximal advantage to each individual. From other side, education programs or learning themes participants form themselves accordingly to their own aims and needs. Adults are advanced on life problems and motivated to learn, if they think that education in short time can solve real needs of life (Knowles, 1990).

Adult education at one time was based on this principle - adults choose what they want to learn, so that the curriculum is built by each learning group and around their particular interests. The outcomes were not pre-set but chosen by the participants, and the evaluation was made by the

participants in terms of their personal satisfaction with their individual needs at the time. This is flexible training - the standardized elements common to all such learning groups are clearly training but the participatory elements mean that the training is made flexible to the local group concerned (Rogers, 2004).

The results of this research indicates that for Jelgava region rural women participation in interest related education is one of the ways how to gain knowledge and skills useful in daily life- it is proved by 23% of respondents. 20% are participated in non-formal education to gain knowledge and skills in which they are interested, 17% to raise self-confidence and 11%- to improve possibilities of career. Learning for adults can be directed to gain specific skills, if they have necessity to gain new or improve existent skills to be more competent or to solve problems in work or in personal life or center on problem or concrete task. An adult gives priority to action with problem that is essential and known to him or expected in real life (Knowles, 1990). Researches by B.Ananjev (Ананьев, 2001) proved that adult' cognitive development changes in impression of education, the structure of mind improve becomes more integrative and wherewithal person's skills of adaptation grow.

17% of respondents are participated in interest related education to meet new people. V.Sibajev (Šibajevs, 2002) about youth in interest related education stresses, that people has a necessity to act, to develop their interests and to be together with equals in age. Learning in groups expands mutual contacts and enriches life experience. Authors experience is indicative that Sibajev point of view can be assigned to adults as well.

It is possible to conclude that non-formal education promotes acquirement of new knowledge and skills, possibility to participate in different activities, to meet new people thereby to lessen social castaway, which isn't occasional in rural areas. Often learning is related to such factors as better employment and, positive communication, it affects self-esteem, self-assessment, and self-confidence and as a result life quality increases. Also A.Rogers (Rogers, 2005) stresses signification of non-formal education in the development of human resources in rural areas.

Women participation in activities of non-formal education in project ECOART, which were related to handicrafts (historically formed woman trade), design and gardening, means that they still have interest to gain new knowledge and skills about it. It is possible to forecast that these skills will be used not only for improving closest environment (in clothing and home), but it can be the beginning of business to create new products.

In this research there were cleared up obstructions what prevent rural women to involve in activities of non-formal education. Responses allow conclude that important obstruction is lack of time (36% of respondents). This can be explained with fact, that rural women in free time of paid employment are working at own household.

Second essential obstruction is lack of money (18% of respondents). Adult non-formal education mostly is paid activity, although part of it financing are from government and budget of local government or private enterprises and organizations. In 2009 29 069 adults were financed from local government for education (frequent courses were ICT, languages, business, handcrafts and psychology) and it covers only 0.02% of all Latvian adult population proportion (Mūžizglītības politikas pamatnostādņu... 2011). About 55% of Latvia local governments give a financial support to adult non-formal education in own area. It means that financial support in government level is trivial. Among population of rural areas problem of unemployment is widespread and incomes are low-wherewithal they chances to involve in non-formal education are less. In the research of Baltic institute of social sciences in 2006 "Access to lifelong learning and opportunities to educate in Latvia" (total respondents in research = 928) were cleared up, that people involved in interest related education mostly are with larger incomes, but 52% of respondents couldn't afford to pay for non-formal education (Mūžizglītības pieejamība un iespējas izglītoties Latvijā, 2006).

In this research cleared up that 57% of Jelgava region respondents are ready to spend money amount from 1-3 Ls per activity, while 15% of respondents say that money does not matter, 11% are ready to spend 3-5 Ls, 9% - 5-10 Ls and 6% - 0 Ls.

It means that lack of financing is serious restrictive factor to education availability. People and local government understanding about acquisitions gained from non-formal education is not enough.

The role of interest related education has not been evaluated in the development of social skills, in keeping and perfection of cultural heritage and traditions and in career growth.

68 % of respondents hold a view that possibilities of non-formal education in cities and in rural are in disparity- in rural they are less, 11% maintain that there are difficulties to get to the municipality centre to courses. 9% of respondents maintain that in rural unemployment is greater, 6% notice that in rural areas there is no one who wants to take responsibility to organize such activities of non-formal education.

The vast majority (92%) of respondents holds a view that possibilities to attend activities in nonformal education is broad only in cities not in rural area; and only 6% see possibilities as equal. The result of Baltic institute of social sciences research resembles broad possibilities of interest and hobby related education is in the capital of Latvia- Riga (73% of 4012) (Mūžizglītības pieejamība un iespējas izglītoties Latvijā, 2006).

Also the obstructive factor is insufficient information about possibilities to learn, 13 % of respondents mentioned it.

Table 2

		Municipalities offer in Jelgava region (amount)													0
Spheres	Eleja	Glūda	Jaunsvirlauka	Kalnciems	Lielplatone	Līvbērze	Sesava	Svēte	Valgunde	Vilce	Zaļenieki	Vircava	Platone	People attend	People wish to attend
Gardening, landscape designing															50 (18%)
Handicrafts (knitting, weaving, beading, wat- ting, silk paitning etc.)		1	1			1	3				2			43 (41%)	65 (24%)
Floristic														8 (8%)	45 (16%)
Cultural education (dance art, music- choir, ensemble, flok music, visual art, thetre, photo art etc,	1	4	2	2	4	5	3	5	5	3	3	3	4	28 (27%)	18 (7%)
Clubs, groups of interests, societies			2	2			4						1		5 (2%)
Sport (soprt dances, chess, aerobics, orien- tation, tourism etc.			1				1		1						8 (3%)
Others (journalistic, art of style, languages, lite- rature creation, line dan- cing belly dances etc.)		1	3	1			2		1		1	1	1	20 (19%)	13 (5%)
Cooking															25 (9%)
Healthy life style (bathing, ecocosmetics etc.)														5 (5%)	45 (16%)

### The offer of adult non-formal education activities in Jelgava region municipalities

Interest related non-formal education has old roots and strong traditions in Latvia as well as in cities or rural areas, for example different groups of applied art (knitting, weaving, wood technology etc.) and cultural education (dancing, choir, music, and theater etc.), courses and studios are still working. Frequently in those participate several generations of one family.

By research in Jelgava region 13 municipals and after results of questionnaire there is worked out survey table (Table 2) of offer and demand of non-formal education activities in Jelgava region. In table there is also included an information about respondents attended activities of non-formal education in last three years.

Broader offer of interest related non-formal education activities in Jelgava region is in the sphere of cultural education. Historically rural people often were active participants in such activities as choirs, nonprofessional theater, folk groups, dancing collectives, in such way they were involved in social life activities, educated and self-actualized. The vast majority of respondents (41%) attended seminars and courses of handicrafts (knitting, weaving, beading, sewing and wattling etc.); next sphere by 27% are- cultural education (dance art, music, visual art, theatre etc.); 19%-other (computer sciences, languages, art of style, journalistic etc.) in last three years, that witnesses about demand of non-formal education and peoples' active participation in it. Less activity was shown in spheres of floristic and healthy life style. As questionnaire was done in the seminars of the project ECOART, it means at least once each participant was involved in non-formal activities.

The result of Baltic institute of social sciences research in 2006 displays that most popular directions in non-formal education were computer sciences, languages and project management; still actual were courses for development of personality: psychology, music and visual arts, but in this research respondents were both- women and men, therefore results by the side of authors research are different. However in the research of Baltic institute of social sciences were accented that women involve in non-formal activities more (28%) than men (18%) (Mūžizglītības pieejamība un iespējas izglītoties Latvijā, 2006).

Gained results in this research indicates that women in rural in non-formal education are more interested in handicrafts 24%, gardening 18%, floristic 16%, healthy life style 16% and cooking 9%. Less interest is about cultural education 7%, sports, club and interest groups and other spheres. Respondents more are interested in knowledge which is practically usable. Separate spheres (gardening, cooking, healty life style, and floristics) weren't offered by municipalities at all; however people are looking for possibilities they are interested in participating in projects, master classes, creative workshops, individual learning etc. The field of offer and demand in interest related education and needs of different social groups are not investigated enough from municipalities.

### Conclusions

Life quality is multidimensional conception which is developed in the frames of various sciences. Between researchers of life quality there isn't a broad consensus about universal and comprehensive definition of life quality, however education is one of the important indicators of life quality. Research displays that rural women didn't mentioned education as priority of life quality.

Evaluation of theoretical and practical researches and analyzes of experience in project ECOART displays that people have wide interest in activities which developes practical skills non theoretical knowledge's. Practical action stimulates people in rural area to active involving, promotes to learn new knowledge and skills which would be used in everyday life or are interesting to participants. It raises self-esteem and gives opportunity to meet and communicate with people- thereby arise new actions to improve themselves and their lives as well as to participate in different social activities.

Participating of rural women in non-formal educational activities (handicrafts, visual and applied art, healthy life style, gardening and designing) initiates creativity, thereby to promote improvement and development of their life environment, as well as to encourage to create new products and to start private business. Thereby non-formal education can promote life quality of rural women and in perspective to stimulate economical development. 77% of respondents are ready to involve in non-formal education activities in the future. It means that rural women have an interest and necessity to improve themselves.

Undeniably there is observed another tendency- some rural people are with less social activity, lack of initiative, are inert and don't want to be get involve in non-formal education activities. Probably they don't understand or don't distinguish significance of education in development of their life quality.

Most important obstructions to participate in adult non-formal education in Jelgava region is lack of time, lack of money for education services, insufficient financial support from state, government and other organizations; availability of studies nearby the home or work place, unequal provision of interest related education in rural and cities and lack of information about learning possibilities.

For better motivation of rural people to act in non-formal education there have to provide offer appropriate to demand, it characterizes with short time of learning, multiplicity, minimum finances and different forms of action. One of the possibilities to obtain all of it in at present is projects with EU financial support. In projects which are international or organized for various social groups, participants have a possibility to communicate and to exchange experience with others.

### References

- 1. *A Memorandum on Lifelong Learning* (2000). Commission Staff Working Paper. Brussels, 30.10.2000. SEC 1832, p. 36.
- Batzdorfer L., Klippel U., Sörensen T., Schwanitz H.J. (2004). Lebensqualität und Berufsdermatosen – Entwicklung und Überprüfung eines Fragebogens zur Lebensqualität bei Berufsdermatosen (LIOD – Life Quality Index Occupational Dermatoses). JDDG, Journal der Deutschen Dermatologischen Gesellschaft, 2: 1000–1006. doi: 10.1046/j.1439-0353.2004.04778.x
- Bela B. (2006). Labā dzīve: subjektīvie vērtējumi un vīzijas. *Dzīves kvalitāte Latvijā* (The good life: subjective assessment and visions. Quality of Life in Latvia). Red. B.Bela, T.Tisenkopfs, Zinātne, Rīga, 38.-61.lpp. [online] [20.11.2011]. Available at <a href="http://petnieciba.lv/index.php?option=com\_content&view=article&id=264:dzves-kvalitte-latvij-&catid=61:visalatvija&Itemid=85">http://petnieciba.lv/index.php?option=com\_content&view=article&id=264:dzves-kvalitte-latvij-&catid=61:visalatvija&Itemid=85</a> (In Latvian)
- 4. Bullinger M., Kirhberger I., von Steinbüchel N. (1993). Der Fragebogen Alltagsleben-ein Verfahren zur Erfassung der gesundheitsbezogenen Lebensqualität (Research for health evaluating in aspect of life quality). *Zeitschrift für Medizinische Psychologie*, Nr. 3, p. 121-131. (In German)
- Bullinger M., Schmidt S., Petersen C. (2002). Assessing quality of life of children: a European approach, *International Journal of Rehabilitation Research*, Vol.25 (3), p.197-206. [online] [06.09.2011]. Available at http://journals.lww.com/intjrehabilres/Abstract/2002/09000/Assessing quality of life of children with\_chronic.5.aspx
- 6. Coombs P., Ahmed M. (1974). *Attacking Rural Poverty: How Nonformal Education Can Help.* Johns Hopkins University Press, Baltimore.
- 7. Delor J. (1996). *Learning: the Treasure Within*. Report to UNESCO of the Internatonal Commision of Education for the 21th Century. Presses Universitaires de France, Paris.
- Dzīves kvalitāte Latvijā (Quality of Life in Latvia) (2006). Red. B.Bela, T.Tisenkopfs, Zinātne, Rīga. [online] [20.11.2011.]. Available at <u>http://petnieciba.lv/index.php?option=com\_content&view=article&id=264:dzves-kvalitte-latvij-&catid=61:visalatvija&Itemid=85</u> (In Latvian)
- 9. Henderson H., Lickerman J., Flynn P. (2000). *Calvert-Henderson Quality of Life Indicators: A New Tool for Assessing National Trends*. Bethesda, MD, Calvert Group.
- 10. *Izglītības attīstības koncepcija 2007.-2013.gadam* (Conception of educational development 2007-2013). [online] [28.08.2011]. Available at <u>http://www.aip.lv/kocept\_doc\_att-kocep.htm</u> (in Latvian)
- 11. Jarvis P. (2002). International dictionary of adult and continuing education. Kogan Page, London.
- 12. Karnītis E. (2004). *Informācijas sabiedrība Latvijas iespējas un uzdrošināšanās* (Society of information- Latvia potencialities and adventuring). Pētergailis, Rīga. [online 01.12.2012]. Available at <u>http://159.148.58.74/grey/valstsparvalde.htm</u> (In Latvian)
- 13. Knowles M.S. (1990). *The Adult Learner: A neglected species*, (4th edition). Gulf Publishing, Houston.
- Kravale M. (2006). Jauniešu neformālā izglītība Latvijā: promocijas darba kopsavilkums. (Youth non-formal education in Latvia: synnopsys of promotional work). DU, Daugavpils. [online] [05.10.2011] Available at <u>http://www3.acadlib.lv/greydoc/Kravales\_disertacija/Kravale\_lat.doc</u> (In Latvian)
- La Belle T.J. (1982). Formal, nonformal and informal education: A holistic perspective on lifelong learning, *International Rewiev of Education*, Vol. 28, Nr. 2, 159-175p. [online] [24.09.2011]. Available at <u>http://www.springerlink.com/content/u77m5272327kn121/</u>

- 16. Latvijas ilgtspējīgas attīstības stratēģija līdz 2030. gadam (Latvia sustainable development strategie till 2030) (2008). SIA Analītisko pētījumu un stratēģiju laboratorija. [online] [05.09.2011]. Available at <u>http://www.latvija2030.lv/upload/lias\_1redakcija\_pilnv\_final.pdf</u> (in Latvian)
- 17. <u>Latvijas izaugsmes modelis: Cilvēks pirmajā vietā (Latvia development model: people as priority)</u> (2005). [online] [12.12.2011.]. Available at <u>http://helios-web.saeima.lv/bi8/lasa?dd=LM0815\_0</u> (In Latvian)
- Mūžizglītības pieejamība un iespējas izglītoties Latvijā, (Access to lifelong learning and opportunities to educate in Latvia) (2006). Baltijas sociālo zinātņu institūts. [online] [15.09.2011]. Available at <u>http://www.bszi.lv/?lang=lv&category=resurss&id=lapa3</u> (In Latvian)
- 19. *Mūžizglītības politikas pamatnostādnes 2007.–2013.gadam* (Policy Guidelines of lifelong learning for 2007-2013). [online] [05.10.2011]. Available at
- 20. <u>http://izm.izm.gov.lv/upload\_file/Izglitiba/Muzizglitiba/Pamatnostadnes.pdf</u> (In Latvian)
- Mūžizglītības politikas pamatnostādņu 2007.-2013.gadam īstenošanas gaita 2009. un 2010.gadā (Policy Guidelines of lifelong learning for 2007-2013 process of implementation of the 2009th and in 2010) (2011). Informatīvais ziņojums. Izglītības un zinātnes ministrija. [online] [06.12.2011]. Available at http://izm.izm.gov.lv/upload\_file/Izglitiba/Muzizglitiba/ML\_pamatnostadau\_zinojums\_2011.pdf (in

http://izm.izm.gov.lv/upload\_file/Izglitiba/Muzizglitiba/MI\_pamatnostadnu\_zinojums\_2011.pdf (in Latvian)

- 22. Ness Ā. (1999). *Dzīves filozofija: Personiskas pārdomas par jūtām un prātu* (Life philosophy: a personal reflection on the feelings and mind). Zvaigzne ABC, Rīga. (In Latvian)
- 23. Oertl W. (2003) *Lebensqualität und Gesundheitszustand von Lebendnierenspendern ein bis 18 Jahre nach Transplantation*. Dissertation (Quality of life and health of living kidney donors one to 18 years after transplantation. PhD thesis.). [online] [11.12.2011]. Available at <u>http://www.oertl.at/wolfgang/files/diss.pdf</u> (In German)
- 24. *Pedagoģijas terminu skaidrojošā vārdnīca* (Explanatory Dictionary of Pedagogic Terms) (2000). Zvaigzne ABC, Rīga. (In Latvian)
- 25. *Pieaugušo izglītība 2007.gada apsekojuma dati* (Adult education- data of 2007 survey). Centrālās statistikas pārvaldes datu bāze. [online] [10.10.2011]. Available at
- 26. <u>http://data.csb.gov.lv/DATABASE/Iedzsoc/Ikgadējie%20statistikas%20dati/Pieaugušo%20izglītība/</u> <u>Pieaugušo%20izglītība.asp</u> (in Latvian)
- 27. Pridāne A. (2007). *Mājturības skolotāja profesionālā kompetence Eiropas kultūras kontekstā* (The Household's teacher professional competence in the context of European culture). *Mājturības un karjeras izglītība Latvijas laukiem Eiropas Savienības kontekstā*, Jelgava, LLU pētniecības projekts Nr. Ilu zp 07-47, IMI, 62.-82. (In Latvian)
- 28. Rogers A. (2004). Looking again at non-formal and informal education towards a new paradigm. The Encyclopedia of informal education. [online] [05.09.2011]. Available at www.infed.org/biblio/non\_formal\_paradigm.htm
- 29. Rogers A. (2005). *Non-formal education: flexible schooling or participatory education?* Springer Science + Business Media Corporation.
- 30. *Socioloģijas skaidrojošā vārdnīca* (Explanatory dictionary of sociology) (1997). Zepa B., Zobena A. red., LU Socioloģijas katedra, Rīga. (In Latvian)
- 31. Šibajevs V. (2002). *Neformālā izglītība interešu centros* (Non-formal education in the centres of interests). RaKa, Rīga. (In Latvian)
- 32. Tisenkopfs T. (2006). Ko nozīmē laba dzīve mūdienu Latvijā? Dzīves kvalitāte Latvijā. (What means good life in Latvia nowadays? Quality of Life in Latvia). Red. B.Bela, T.Tisenkopfs. Zinātne, Rīga, 13.-37.lpp. [online] [20.11.2011]. Available at <a href="http://petnieciba.lv/index.php?option=com\_content&view=article&id=264:dzves-kvalitte-latvij-&catid=61:visalatvija&Itemid=85">http://petnieciba.lv/index.php?option=com\_content&view=article&id=264:dzves-kvalitte-latvij-&catid=61:visalatvija&Itemid=85</a> (In Latvian)
- 33. Tight M. (2003). *Key Concepts in Adult Education and Training*. (2nd ed.), Rutledge, Taylor & Francis Group, London, New York, p.68-69.
- 34. Ананьев Б.Г. (2001). *Человек как предмет познания* (People as object of cognition). Питер, СПб. (In Russian)
- 35. Субетто А.И. (1994). Управление качеством жизни и выживаемость человечества (Life quality management and humanity survival) *Стандарты и качество*, № 4, с.63 65. (In Russian)

# PUPILS' LEARNING SKILLS ACQUISITION CONDITIONS IN HOME ECONOMICS AND TECHNOLOGIES LESSONS IN PRIMARY SCHOOL

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**Abstract:** Pupils' learning skills are one of the most important human qualities for achieving the set aims. Accordingly, in the personality formation process it is essential to develop the qualities which facilitate the consolidation of pupils' learning skills as a characteristic trait.

The observations of pupils especially at early school age prove that pupils' learning skills are weak or it does not exist at all. In the consolidation of pupils' learning skills in primary school a special role has the subject of home economics and technologies the content acquisition of which is connected with the methods of practical work.

Pupils' learning skills - it requires overcoming hardships, thus, in its full meaning it can be assessed as a quality of strong will.

During the research the factors facilitating pupils' learning skills in home economics and technologies lessons in primary school have been revealed.

Keywords: learning skills, home economics and technologies.

### Introduction

The education system is being radically reformed in Latvia, in Europe, as well as all around the world, and the sphere of teachers professional education changes accordingly with other educational reforms. A teacher learns to introduce the latest technical proposals into a teaching process, looking for new methods of work organisation in order to acquire the teaching content. A teacher's professional competence will be directly dependent on the success of the reforms and the future perspectives of humanity in general. In recent years, more emphasis has been placed on pupils' learning skills acquisition issues, including economics and technologies.

As illustrated by the recent observation, the characteristic feature of any handicraft technology acquisition process at the start of early school age is a quest for faster results, not encountering task requirements. As a result, pupils incompletely acquire not only planned handicraft technology skills or knowledge highlighted by the Standard of the subject, but they lack the most important aspect related to the education process, i.e. the pupils' personal development (Regulations for National Standards in Primary Education and Primary Education Teaching Standards, 2007). It has been observed in practice that pupils' ability to listen to is poorly manifested or non-existent at all. Interestingly, the observations are similar when working with students and teachers. Pupils' incompletely acquired skills to listen to become part of the reason for the failure to solve life problems, understand the meaning of life and realize their own value. At school, according to M.Scott Peck, we spend a lot of time teaching children to read, teaching them how to speak, and we usually do not spend time at all in order to teach them how to listen (Scott Peck, 2005).

Therefore, at the subject of home economics and technologies it is necessary to help pupils acquire the importance of listening skills and apply them to different situations in life and social activities that form the learning skills acquisition base.

#### Aim of the Study

Explore and discover pupils' learning skills acquisition at the home economics and technologies lessons in primary school.

### Materials and Methods

The present paper contains bibliography analysis, observations, an incomplete sentence test, interviews and the analysis of practical experience.

A study was carried out at practice schools of Riga Teacher Training and Educational Management Academy (both urban and rural schools), in full-time and part-time students' groups and teacher training courses of Riga Teacher Training and Educational Management Academy.

The epoch demands for new requirements in education as the information age; as the age of social, political and economic changes; as the age of different cultures and human mobility; as the moment in the history of civilization, when there is a clear threat to the survival of humanity. The dominant of behavioural, cognitive and pragmatic educational theories, which includes the inheritance of universally recognized knowledge, is substituted by a postmodern constructive educational paradigm which recognizes that each individual constructs his own knowledge about the world, depending on his individual potential and his experience.

In the second half of the last century the influence of the representatives of humanistic psychology (K.Roger, A.Maslow, R.Burns, etc.) affected the teachers' attitude towards the pupil's personality. In humanists' view, a personality is discussed as a subject of activity rather than a result of external influences. In humanitarian paradigm a pedagogical process is the creation of conditions for the promotion of personality development. The most important human qualities are emphasized: freedom, autonomy and responsibility (see, Figure 1).

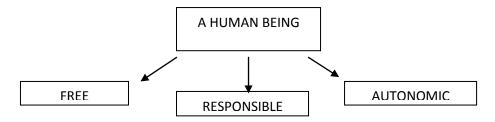


Figure 1. A human being's image in educational humanitarian paradigm

One of the founders of positivism, English philosopher Herbert Spencer (1820-1903) believed that the ultimate goal of education is not knowledge but action. Free personality, according to A.Špona and I.Čamane, in activity will advance the aim, make choices and take responsibility (Špona, Čamane, 2009).

Skills development in humanitarian pedagogy does not advance as the ultimate objective only reproductive executer's operations in accordance with the specimen (as in normative pedagogy). Skills acquisition can be seen as an opportunity for pupils. When we have acquired a new skill, we open new opportunities, and this human ability extension is an educational destination (Prets, 2000). Learning skills acquisition is significant in the teaching process, particularly at an early stage.

It is typical to early school age pupils that the game as the leading activity of a child's life is replaced by a systematic teaching, on the basis of which the child's psyche is developed. For children of early school age, as D.Elkonina indicates, it is characteristic to have such neoplasm of the psyche as *an internal planning of activity, self-control, which is based on introspection.* From the sphere of psyche **intellect** is mostly developed (Эльконин, 1974, 14). Primary school children are characterised by the fact that as soon as they gain the initiative, they often immediately manifest it in their work, without encountering task requirements. It is related to impulsiveness typical to the pupils of this age - acting immediately by the influence of direct impulses, momentum, being submitted to the subject of spirituality without thinking and considering all the circumstances. This is explained by the fact that the willpower at this age is still too weak to regulate **attention.** 

Pupils' attention, as A.Lublinska admits, can and should be developed. A child focuses his attention in an active process; it is not only caused, but also maintained by rationally organized activity, first and foremost by an active intellectual work (Lublinska, 1977). A combination of a speaker and listener is actually self-expansion and improvement, and new knowledge will always be acquired from this process. In most cases, we lack this energy needed for listening. Listening, according to M.Scott Peck, is active love, it is very necessary in the family, to really listen to each other. Just as important, it is in business undertaking or social relations (Scott Peck, 2005). Home economics and technologies subject in early school age classes provides ample opportunities for the

development of deliberate attention which is more increasingly required in the further learning process. Not only for the development of deliberate attention, but also for the perception, memory and thinking, it is necessary to have:

- suitable work pace
- easily understandable teacher's explanations
- instructions provided prior to the commencement of work and not repeated during the tasks execution time.

Attention, according to Rollo May, is an act of will; it is work contrary to the torpor of our mind. The effort, which is part of the will, in fact, is the effort of **attention**. The tension of will is an effort to keep a clear conscience, that is, the tension to keep the focus of attention (May, 1969).

In its turn, listening, according to M.Scott Peck, is the most important form of attention; however, other forms are required as well, especially for children. The variety of possible forms is enormous. One of those is games (Scott Peck, 2005). Quality of attention is proportional to the intensity of concentration while working. Time spent in active operations, as recognised by M.Scott Peck, creates countless opportunities to acquire basic skills and principles of discipline. Tasks are often boring, burdensome, and they always deplete energy since it is work (Scott Peck, 2005). G. Rudzītis noted that the development of will begins in early childhood together with speech development and is improved throughout life. Activities of will are encouraged by people's material and spiritual needs. School teachers, as the author admits, contribute to the pupils' will to learn by stimulating the cognitive process of interest, with the desire to create with their own hands some beautiful, practical, useful products (Rudzītis, 1999).

A. Lublinska recognizes that pupils' perception is intimately connected with the activity, particularly in forms 1 and 2. Therefore, the acquisition of handicraft technologies is important when using a variety of materials (clay, plasticine, natural materials, industrial remains, textiles, etc.), it is important to study the characteristics of this material, feel the material itself. The teacher has a significant role here in promoting pupils' learning skills to observe, watch, compare and listen in particular. In order to implement this, it is necessary to intentionally organise pupils' activities for the detection of significant qualities of some object, objects or phenomena, including assignments in the task requirements that foster pupils' listening skills. In the learning process, according to A.Lublinska, the restructuring of **perception** occurs; it increases to the higher stage of development. In the process of perception the activity is not aborted, but the attitudes of perception and activity develop into a different disposition. Earlier a pupil perceived the subject in order to precisely operate with it, whereas later he deals with the subject to perceive it – the ultimate goal is the perception, but activity – its modifier (Lublinska, 1977).

Major changes take place in the **memory** and its processes of pupils from early school age forms. V. Hibnere defines memory as a cognitive process that involves memorization, saving and a later reproduction or recognition of previously received, experienced and performed (Hibnere, 1977). Teaching of an early school-age child requires the ability to manage one's memory: to memorize techniques, how to work with the ruler, how to deal with scissors, sewing needle, crochet hook, to learn the correct gluing technique. *In accordance with the content of stored information*, there is the imaginative, motion, emotional and conceptual memory (Lub]inska, 1977). Handicraft technology teaching is of paramount importance to the first three types of memory.

Imaginative memory is expressed by a good ability to memorize and store nature scenes, life situations, sounds, smell, taste. Depending on the analysis technique by which a person receives something, memory can be divided into visual, auditory, olfactory, gustatory, and tactile memory (Ļubļinska, 1977).

Through the visual memory a child performs movements in handicraft, works with the tools, evaluates the results of the work in relation to the initially seen sample or compares with the notion that has appeared in his consciousness regarding the object in display, the reproduced image, and adjusts it according to this experience. As a result, the handicraft activities develop vision and coordination, which is also required for math, writing exercises, etc., In order to draw a straight segment with a ruler, measure, cut and fold the paper into the place selected, embroider or crochet, tailor or appliqué it is necessary to build on the existing sensomotoric communications. At sports

lessons sensomotoric connections are created through the work of the big musculature, handicraft lessons, in turn, offer the development of the finest association between the sensory and movement cells in the cerebral cortex.

The subject of home economics and technologies is not just any kind of work, which contributes not only to visual but also to *tactile* memory in which children can explore the characteristics of material (hard, dense, humid, hot, cold, clammy, etc.), can determine whether or not the surface of the object to be made is smooth or rough, etc. Therefore, the acquisition of the teaching content requires for tasks for the promotion of cognitive functioning where pupils become acquainted with the materials by viewing, touching, basically dismantling of woven fabrics. By comparing and identifying material composition, the learning skill is acquired.

No less important is the *auditory* memory. Hearing particular tool or instrument sounds, there is a concept of the materials used at work, the type of action, instruments, and sometimes even there is the imagination regarding the potential product.

It is observed that the fairy tale, story, poem or song that has been heard recalls manufactured products made at the lessons of home economics and technologies, sometimes even the process of their manufacturing.

In the subject of home economics and technologies there are tasks, though significantly less associated with the *olfactory and gustatory* perception, memory. Pleasant emotions not only for the boys, but also for future teachers, students, are created by the aroma arising from the marking of the image in the plywood, making fresh vegetable salad. In pupils' personal development it is significant to promote the development of all types of memory.

**Thinking** is of great importance in this process. Thinking and activity are closely related to the solution of new unusual tasks, task requirements. Preparation of proposed images in a formation, sewing patterns, or application, children's mental activity is particularly intense. In order to achieve a sufficient sense of image clarity, a child strains both memory and thinking, and also occupies a certain emotional attitude towards imaginary apparition. At the same time, it is important to comply with the task requirements in the learning skills acquisition process and include them into pupils' self-assessment criteria.

It should be noted that until 1950s the assessment used the regulatory assessment where the subject of assessment was pupil's knowledge, skills and abilities. Educator, by performing the expert's functions, realized the classification of individuals. It should be admitted that this approach stayed in pedagogical practice also for further periods. In turn, in 1980s the assessment paradigm changes in the development of the pedagogical thought in the world. Assessment is based on the constructivism approaches in the organization of the learning process. Assessment becomes not so much the instrument of control, as the learning-based tool. Hence the new assessment methods appear - self-assessment, conversations. The assessor is both - an educator and a learner. In the self-assessment when analyzing one's personal growth, experience there is the opportunity to assess for the pupil, including the assessment of ability to listen.

Individual development dynamics, according to D.Prets, requires comparing their existing experience with their "yesterday" and "tomorrow" experience. "Inner experience is characterized by the fact that it focuses on the present moment rather than past or future" (Prets, 2000). Therefore, their teacher's proposed evaluation criteria help see and appreciate the dynamics, providing the opportunity to gain the satisfaction of their abilities, while seeing the way for further development of learning skills.

#### **Results and Discussion**

An empirical part of the study was performed at the practice schools of Riga Pedagogy and Educational Management Academy (156 students). An empirical study also involved 241 full-time and part-time students, teachers-to-be of the courses "Primary school teacher with the right to teach a single subject in the elementary school" and "Pre-school and primary school teacher", as well as 310 teachers of further education.

A group of researchers from the University of Latvia under the direction of Andris Kangro in accordance with a new conceptual approach of education quality assessment recognizes that it is

important to assess a pupil's ability to apply the knowledge, skills obtained at school and developed attitudes to real life situations, rather than to test what they have learned in specific subjects (Geske, Grīnfelds, Kangro, Kiseļova, 2004). Therefore, the study was based on the selected pupils', students' and teachers ' skills to listen. In the course of study the same assignment was offered to pupils and students, as well as Home Economics teachers of forms 5-9. The assignment was to appliqué a city at night. The task requirements were explained just once – in the application to use:

- three colours black (basic), white (for houses), for windows (black or yellow),
- geometrical shapes (rectangles and triangles), for other groups (squares and triangles), or just rectangles.

Pupils', teachers' and teacher programme students' ability to listen was denoted by the four indicators:

- 1. The tasks correspond to all requirements.
- 2. The compliance of the tasks has not followed the requirement relating to the use of named geometric figures in the application.
- 3. The tasks have not complied with the requirement relating to colors.
- 4. The tasks have not complied with any requirements.

When observing pupils, students and teachers in a practical activity, it was confirmed that most of the participants involved in the study had a characteristic feature to start the activity without encountering task requirements. It is typical that specific groups (in students' and teachers' audience) had an explicit desire to converse with each other.

To be able to perform the analysis, at the end of class all works were displayed in the exhibition, which is an important condition in the process of learning skills development.



Figure 2. Performance of Home economics teachers' tasks

Surprisingly, it was complicated to observe the task requirements in the teachers' audience (a group of 60 people) for 79% of respondents, there are also teachers who got carried away with creative work, completely forgetting about the conditions relating to geometric shapes (see, Fig. 3, work 3), colour selection (see Fig.3, works 1, 4, 5), and there are also teachers who have forgotten about both conditions (see, Fig. 3, work 5). Interestingly, in smaller groups results are better and all the given conditions are observed (see, Fig. 3, works 2 and 6).

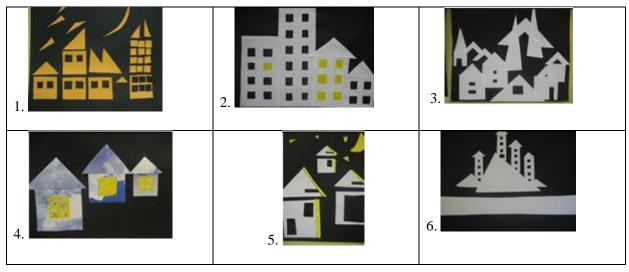


Fig.3. Typical examples of the implementation of the task requirement

Compiling full-time students' results, it was found that all conditions were observed in only 38% of tasks performed by the teacher programme students. By contrast, 32% of respondents did not comply with any condition. Through the research, we made certain that in recent years students' creative activity indicators are higher: a creative experience has become more modifiable, artistic tastes are more manifested and there is a positive attitude toward the independent creative work, but the requirements for tasks fulfillment remain forgotten.

The most interesting results were obtained in those groups where respondents were able to use all application set. Percentage of works that did not comply with the requirements relating to the colours increased, it was most likely enabled by a wide choice.

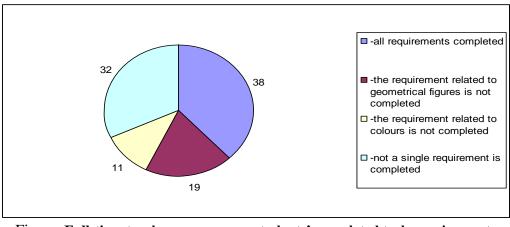


Figure. Full-time teacher programme students' completed task requirements relating to applications skills performance

The unfinished sentence method found the students' reasons for failure to comply with the task requirements. By classifying the answers, we obtained the results that 15% of the students openly declared that the requirements were not heard of, 43% - enjoyed their proposed idea that fantasy unfolded and the will to complete the work appeared, while 38% of respondents recognized as the main reason that it was interesting and that the previous experience helped not weaken the work assessment due to the failure to complete the requirements.

Thinking about learning skills development in the curricula of home economics and technologies, it is necessary to promote the pedagogic students' self-assessment skills, to develop self-discipline. Therefore, the learning process has to include the tasks with additional conditions that develop listening skills, enable activity of will, increase quality of attention, and promote thinking, which is a base for learning.

On the other hand, when comparing the results of part-time pedagogic students and home economics teachers of forms 5-9, it can be concluded that the important factor is the teachers' experience.

Most of the part-time teacher programme students have problems with the lack of precision in cutting, paste. As a result, there are works the quality of which is equal to primary school pupils' works. It shows a lack of various skills (especially general technical and special) acquisition not only in the primary school, but also in the following years. It is based on a number of reasons: inadequately developed attention, perception, thinking, memory, or an explicit lack of need or motivation.

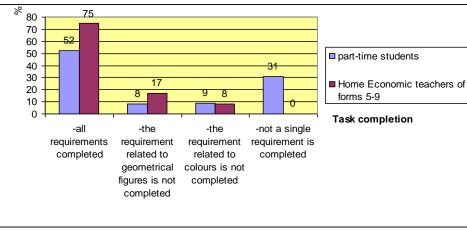


Figure 5. Home Economics teachers' of forms 5-9 completed task requirements relating to applications skills performance

In discussions with the students we clarified that the students consider observation of given requirements in tasks completion being a minor factor, since non-compliance of requirements does not reduce the assessment of the work, if an original, amazing is found idea. Nowadays, one of the reasons for this phenomenon is people's not acquired self-organization, self-discipline skills.

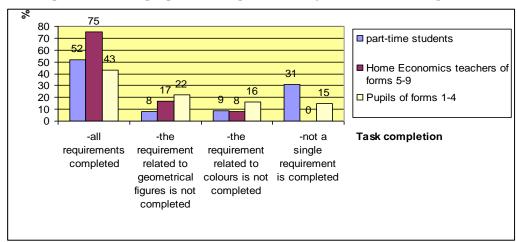


Figure 6. Pupils', students' and Home Economics teachers' of forms 5-9 completed task requirements relating to applications skills performance

As illustrated by the recent observation, the most characteristic feature of all handicraft technology acquisition process at the youngest school age is a quest for faster results. The explanation lies in the surplus of physical energy, lack of imbalance between energy and its practical use at the initial stage of early school age (Students, 1935). While the explanation of students' and teachers' behaviour is connected with the experience to hurry gained at school, which has consolidated as a habit.

Analyzing pupils', students' and teachers' performance, as well as conducting the observation of the process, we found out that nascent teachers and primary school students' abilities to listen to and

observe all the requirements are close (52% and 43%). In their turn, nascent teachers are less careful in completion of both requirements (31%). It should be noted that listening skills scores of home economics teachers of forms 5-9 are higher than those of the teacher programme students and primary school pupils. Explanation is connected with home economics teachers' of forms 5-9 experience to use pupils' self-assessment in learning skills acquisition. The survey results confirmed D.A. Leontjevs' cognition that subject's meaning of life in relation to object may not be identical for different subjects, because the object's place in the subject's life activity is different (Леонтьев, 2007, 123).

Pupils from early school age classes are not yet able to concentrate on multiple objects simultaneously, so it is important for teachers to choose a suitable form and type of work, to periodically change them according to the theme and basic objective of the lesson, including in the learning process requirements for listening skills advancement. In the course of the study E.H.Ēriksons's cognition was confirmed that emotional mood affects the pupils' mental processes: attention, memory, thinking, etc., and the information that pupils perceive by the inner emotional response, remains in the memory and becomes personally significant for a pupil (Ēriksons, 1938).

It has to be noted that the results should not be generalized, because it was observed during the study that there are significant differences in different schools, auditoriums. Previous experience has considerable importance. At schools pupils' learning skills are closely linked to teachers' professionalism, especially in the subject of home economics and technologies that includes seriousness, hardness and joy, and therefore this subject is important not only for learning skills acquisition, but also for personality upbringing. Practical observations confirmed the previously nominated assumption that learning skills are closely linked to the pupils', students' and even teachers' ability to listen. It is significant that the additional task requirements given to the performance of the tasks do not restrict independence, responsibility and freedom of creative activity.

By collecting the previously obtained information, it can be observed that in the improvement of learning skills it is significant to include the task requirements into assessment and self-assessment criteria. As a result of the study it was certified that the teacher, especially in a primary school, to a large extent determines the fact that pupils will acquire learning skills as important for themselves, that pupils' ability to listen, ability to learn to learn is more effective when combined with the emotional response, with pupils' daily lives, their previous experience, unconventional lessons, acquisition of new technologies, which also are pupils' learning skills acquisition conditions in home economics and technologies lessons.

### Conclusions

- Pupils' learning skills are closely related to pupils', teachers' ability to listen.
- The obtained survey results showed that the teaching activity has to be closely linked to pupils' self-assessment, development of specific evaluation criteria. Evaluation criteria must be numerically few, clearly defined, regularly used in the teaching process.
- Pupils' self-assessment criteria have to be implemented throughout the teaching process according to the specific character of a subject of Home Economics and technologies and the requirements given for the task completion.
- Primary school pupils' learning skills acquisition requirements are pupils' ability to listen, relevance of the learning content to the emotional response, to pupils' daily lives, their previous experience, unconventional lessons, acquisition of new technologies at a subject of Home Economics and technologies.
- The assessment is focused on pupils' learning skills achievement recognition, assuming restrictions as the opportunities for growth, rather than as the search for errors and imperfections.

### References

- 1. Ēriksons E. H.(1938). *Identitāte, jaunība un krīze. (*Identity, juvenescence and crisis). Rīga, Jumava. (in Latvian).
- 2. Geske A., Grīnfelds A., Kangro A., Kiseļova R. (2004). *Mācīšanās nākotnei*.(Learning for future). *Latvija in OECD countries International pupils' assessment programme*. University of Latvia. (in Latvian).
- 3. Hibnere V. (1977). *Bērnu tēlotājdarbības psiholoģija*. (Psychology of children's pictorial activity). Rīga, Zvaigzne, p.11. (in Latvian).
- Lublinska A.(1979). *Bērnu psiholoģija*. (Children's psychology). Rīga, Zvaigzne, pp. 182 185. (in Latvian).
- 5. May Rollo (1969). Love and Will. New York: Delta Books, Dell Pub., p. 220.
- 6. *Noteikumi par valsts standartu pamatizglītībā un pamatizglītības mācību priekšmetu standartiem.* (2007). (Regulations on Public Standards in Basic Education and Subject Standards). <u>http://isec.gov.lv/normdok/mk061027.htm</u>. (in Latvian).
- 7. Prets D. (2000). *Izglītības programmu pilnveide.* (Development of educational programms). Rīga, Zvaigzne ABC, p. 383. (in Latvian).
- 8. Rudzītis G. (1999). *Gribas un rakstura veidošana mācību darbā un pašizglītībā*. (Formation of will and character). Teaching aid for students, young teachers and postgraduate students. Jelgava, LVU, p. 7. (in Latvian).
- 9. Skots Peks M. (2005). *Nepazīstamais ceļš*. (The Road Less Traveled). Rīga, Zvaigzne ABC, pp.101-195 (in Latvian).
- 10. Students J. (1935). *Bērna, pusaudža un jaunieša psiholoģija*. (Child's, teenager's and youth's psychology). Rīga, author's edition, p. 16. (in Latvian)
- 11. Špona A., Čamane I. (2009). *Audzināšana. Pašaudzināšana*. (Upbringing. Self–education). Rīga, RaKa, p. 65 (in Latvian).
- 12. Леонтьев Д. А. (2007). Психология смысла. (Psychology of Intent). Москва: Смысл, с. 123. (in Russian).

# Development of vocational education and career development

# COMPARATIVE ANALYSIS OF WELTANSCHAUUNG IN VOCATIONAL SCHOOL STUDENTS

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**Abstract:** The research methodology of world view or weltanschauung in vocational school students is based on phenomenology, hermeneutics and existentialism. Those theories justify possibility to discover world view in human language. On the base of those theories the content and structural model of world view has been worked out and criteria for retrieving world view or its elements has been found. The comparative analysis of world view has been made on the basis of 120 final exam essays in Latvian language and literature in 2004, 2007 and 2011. Text analysis has been performed using program Weft QDA. The research shows that world view as a system of knowledge, confidence and attitude based on values in vocational school students is present in rare cases. The existence of world-view is confirmed by personified values (love, family, and understanding). However, in issues existentially important for young people, only fragmented pieces of knowledge and no skills to use it has been discovered.

Keywords: world view (weltanschauung), attitudes, values, personification of values

# Introduction

World-view (weltanschauung) is a question of philosophy: phenomenology and existentialism reveal the formation of world view as containing subjective elements and elements of social reality, including education. This allows studying the world view world view and its formation within the process of education. World view is connected with the human experience and its moral (value) components as well as religion, this makes possible to seek a transcendental dimension of the world-view, assuming that the depth of the world-view is created by the ability of a person to transcend oneself. World view is homogenous and coherent, strongly associated with elements of the psyche, is expressed through attitudes towards reality, and in language. It is achieved by the individual (Husserl, 2002) and allows a person formulate an attitude towards life (Husserl, 2002; Jaspers, 2003; Heidegger, 1998) and is revealed through personal attitudes.

The attitudes and partially the world view form as a result personality formation (Husserl, 2002; Jaspers, 2003; Heidegger, 1998) and are influenced by environment (Heidegger, 1998), which are parts of the process of education. The aim of the article is to determine the content of the world view of vocational school students. Even if it is impossible to determine the criteria of truth for world view (Heidegger, 1998), we have formed criteria – attitudes, personification, values – that allow determining the presence of world view. Individualised attitudes to reality, based on humanism (Heidegger, 1998) appear in the form of consciously formulated personified values in the youth world view. The world-view is a subjective, human construction (Derrida, in Naugle, 1998), influencing the life of a person (Foucault, 1970) and the society (Berger and Luckmann, 1966), and thus can be in the focus of a study.

As the world view is revealed by human creative activity (Hegel; Dilthey in Naugle, 1998; Husserl, 2002), this research has been conducted on the materials of creative essays in the state exam of the Latvian language and literature in 2004, 2007, 2011.

# **Documents and methods**

The research presents comparative analysis of world view (weltanschauung) of vocational school students in Latvia. 40 documents for analysis per year were randomly chosen from 4700-5000 exam essays in Latvian language and literature, written in 2004, 2007 and 2011, 120 essays in total. *Weft QDA* programme was used for content analysis, coding the selected works with 3 code groups. World

view is formed as personal attitudes, based on values, so the documents were coded according to the level of personification (see Table 1), analysing, which pronouns dominate the language of the essays.

Table 1

Personified	Not personified
I, we (all forms)	You (all forms)
My, our (all forms)	Your (all forms)
	He, she, they (all forms)
	One, man, person (all forms)

# Codes of personification

The second group of codes was designed corresponding to the criteria characterising the attitudes, and seen by indicators (see Table 2).

Table 2

<b>Criterion</b> \indicator	Personal involvement	Not involved personally
Attitude to self	Self-respect	Alienation
Attitude to nature	Holistic attitude to nature	Declaratory views
Attitude to history (society)	History as my (our) history	Their history

## Codes for criteria indicators

The third group of codes reflect the values mentioned by the authors, as the world view is based on personified values (see Table 3). The composition of values was determined after the primary data processing.

Table 3

Value codes (	in 2004 and 2007	documents)
i anac coucs	III 2004 and 2007	uocumento)

Code	Value	Code	Value	Code	Value
ut	trust	Uz	commitment	Db	work
la	kindness	Dr	friendship	Mī	love
go	integrity	Pie	forgiveness	Ģi	family
ča	diligence	Db	nature	Nb	Money, wealth
at	openness	Va	State, patriotism	Br	freedom
сс	dignity	Ii	choice	Zi	knowledge
sa	sympathy				

The Centralised exam in the Latvian language and literature was changed in 2011, offering only one theme for the essay, namely "The contradiction between feelings and reason", illustrating it with examples from Latvian literature and history. The theme influenced the content, and the analysis of the texts called for slightly different coding (see Table 4). The number of values mentioned in the 2011 essays is smaller (cf. 13 in 2011, while 19 in 2004 and 2007).

Table 4

Code	Value	Code	Value	Code	Value
mī	Love	Uz	Commitment	na	Money/wealth
dz	Homeland	La	Kindness	da	Work
ģi	Family	Go	Integrity	br	Freedom
jū	Feelings	Ča	Diligence		
pr	Reason	pie	Forgiveness		

Value codes (in 2011 documents)

In order to draw conclusions of the level of personification, the codes confirming personification were designated as positive, and the codes showing absence of personification – as negative. The result was a visual representation of the dominant level of personification in each document (see tables 5, 10, 11, 12).

The documents were numbered as follows: 1-40 for 2004, 41-80 for 2007, 81-120 for 2011. However, in order for the graphs and comparison to work, a secondary numeration was introduces, numbering each year 1-40 separately.

## **Results and discussion**

The study of codes revealed that personification codes only seldom indicate distinct personification or absence thereof in a document. Most often each document contained fragments showing personified attitude to the subject, and other fragments showing absence of personification. So document 10 contains 10 personifications and 17 absences of personification codes, document. 5 - 2 and 2 correspondingly, document. 9 - 3 and 7, document. 39 - 1 and 3, document. 44 - 4 and 5, document. 69 - 4 and 2. The 2011 documents show a similar tendency: document. 84 contains 2 personification and 4 absence of personification codes, document. 90 - 4 and 4, document. 98 - 3 and 3, document. 102 - 8 and 3, document. 116 - 4 and 1.

This situation shows an attitude of considerable dualism to the world, when the author feels partial and personally responsible for some issues, whilst distancing oneself from other issues. This situation, even in cases when the absence of personification codes prevails, allows to assume that there might be a development in the direction of personification. The majority of works show a mixture of attitudes, and few of the works show a systematic attitude of personification in 6 (15%) cases, systematic attitude of absence of personification in (15%) case; the 2007 essays – in 4 (15%) and 2 (15%) cases, systematic attitude of absence of personification in 3 (7,5%) cases. The table below reflects the dominant form of personification/absence of personification (See Table 5)

Table 5

Table 6

Personification
I el somme avion

Doc.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
2004	-7	-5	7	-6	0	-3	-2	-10	-4	4	0	-7	-5	4	6	-2	-3	5	1	4
2007	2	-1	-3	3	-1	0	7	0	7	-4	1	2	4	2	11	4	3	-1	4	9
2011	-1	-10	1	-1	2	-2	-4	-2	2	-2		1	5	3	-1	3	2	0	3	1
Doc.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.	31.	32.	33.	34.	35.	36.	37.	38.	39.	40.
2004	-4	-2	-1	1	4	-6	8	-1	2	-2	-4	6	4	5	-2	-3	1	-1	-2	2
2007	-5	2	4	-1	3	-2	-1	-1	2	2	5	3	-8	1	8	0	1	1	2	-1
2011	-3	5	2	1	-3	3	7	3	4	5	-2	2	12	1	2	2	4	1	9	3

Majority of the dominant indicators of personification fluctuate at zero level with a small prevalence of the positive indicators, which increases in 2007 and is even more prominent in 2011 (see Table 5).

Frequency of criteria codes indicators in 2004

	Doc.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
History	My history			1													1				1
History	Their history			-1						-1				-1			-2				
Nature	Holistic attitude to nature	1		4							2										
Inature	Declaratory views	-5	-3	-6	-4	-2	-4		-3	-1	-1	-1	-3	-3	-3		-1	-3	-1	-2	-2
Human	Self-respect						2	1			2				1	2			2	1	2
self	Alienation	-1	-2	-1	-2	-1	-2	-1	-1	-2		-1	-3	-2	-3			-1		-1	
	Doc. Nr.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
History	My history							1													
HISTOLY	Their history			-1	-1					-1										-1	
Nature	Holistic attitude to nature																				1
Nature	Declaratory views	-1	-2	-1		-1	-1	-1	-2	-2	-2	-3	-3			-1	-2	-1	-1	-5	-2
Human	Self-respect			2		2	2	2					2		1	1			1		1
self	Alienation	-2		-4		-1			-2		-1	-2	-1	-2	-2	-1	-2	-1		-3	

This might indicate a tendency of the young people to understand the subjects of discussion, be involved personally and discuss the themes, based on personal experience; this might indicate a wish to formulate their attitude towards the world and their place in it. However the presence of the negative indicators shows inconsistency of personification (fragments with attitude of personification and absence thereof in the same document) shows that the authors are not conscious of this wish and do not have corresponding skills.

In the second group of criteria, indicators of alienation, declaratory views, attitude to the society as 'them', 'their history', have been designated as negative values (Table 6, 7, 8)

Negative indicators prevail in documents in 2004 (Table 6), which shows that the young people lack self-awareness, cannot be characterised as having self-respect or positive attitude to the nature or history (document. 3; 10; 40). There is no document with all three positive criteria indicators.

Table 7

	Doc.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
History	My history																		1		
	Their history				-1																
Nature	Holistic attitude to nature																		1		
	Declaratory views	-3			-3	-2	-1	-4	-1	-2	-2	-1	-1		-1	-1	-1				-2
Human self	Self-respect		2				4		2	1			2	2	1	1	2	1	2	2	
	Alienation	-3	-1	-1	-1	-2			-1	-1	-1						-1				
	Doc.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
History	My history		1																		
	Their history					-1			-2					-1							
Nature	Holistic attitude to nature																				
	Declaratory views			-1	-1	-2	-1			-3	-1		-2	-1	-1		-1		-1	-1	-3
Human self	Self-respect	2	3		1		2	2		1	1	2			2	1	2	2	1		1
	Alienation			-3	-1	-1							-1			-1		-1			

Frequency of criteria codes indicators in 2007

The 2007 documents (see Table 7) show a slightly more prominent presence of the positive indicators in comparison to 2004. In one case (document. 18/2007, No 58 in common numeration) three positive indicators are present in the text.

The same document shows also positive personification level in addition to the positive criteria indicators, which allows to assume that the author of this document is forming a holistic view of oneself and the world, and a world view is in formation.

Table 8

	Doc.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
History	My history									1											
	Their history																				
Nature	Holistic attitude to nature															1		2	2	1	
	Declaratory views		-1		-1		-1	-1		-2	-3				-2		-1				
Human self	Self-respect	1								2	1		1	1	2			1	2	1	
	Alienation	-1	-1	-1	2	-1		-1	1	-1		-1				-1	-1				-1
	Doc.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
History	My history												2	3				1			
	Their history																				
Nature	Holistic attitude to nature		1		1		1	1					1	1		1		2		1	
	Declaratory views											-1		-1					-1		-1
Human self	Self-respect		3	1	1				3	1	2		2	3	1	1	3			3	1
	Alienation	-1				-1															

Frequency of criteria codes indicators in 2011

The 2011 documents show even more prominent presence of the positive criteria indicators (see Table 8), codes indicating self-respect and holistic attitude to the nature become more frequent. In two cases (documents 32 and 33) three positive criteria are present, and in 9 cases (documents 9; 17; 18; 19; 22; 24; 35; 37; 39) two positive criteria are present. This shows that a unified personified view of

Table 9

self in the world and history is more frequent, which could indicate a greater possibility for formation of a world view.

Summing up the codes for values in the documents, we can see the frequency (see Table 9)

Doc. 10. 12. 13. 14. 15. 16. 17. 18. 19. 1. 2. 3. 4. 5. 6. 7. 8. 9. 11. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. Doc. 

Value codes in documents

Even if the number of values mentioned in the documents does not directly indicate that these
values form the core of world view and are personified, i.e. considered to be personally important, it
still is possible to develop a conceptual understanding of the attitude of the young people to values,
and see which values they consider important. There are documents (see Table 9) which mention five
or more values. In 2004 those are documents 1, 5, 8, 18, 20 in 2007, 25, 26, 29, 34 correspondingly; in
2011 documents: 2, 14, 21, 22, 25, 30, 31, and 33. At the same time, there are documents where no
values are mentioned at all: in 2004, documents 4, 11, 12, 14, 15, 17, 24, 25, 26, 27, 28, 30, 33, 35, 36,
37 (16 altogether), in 2007: documents 3, 7, 11, 15, 33, 36 (6 altogether), in 2011: documents 83, 88,
91, 96 (4 altogether). This indicates disturbing news that no values whatsoever appear even on the
level of mentioning in the essays of young people: 40% of the cases in 2004, 15% of cases in 2007,
and 10% of cases in 2011.

Table 10

Table 11

Nr	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Personification	-7	-5	7	-6	0	-3	-2	-10	-4	4	0	-7	-5	4	6	-2	-3	5	1	4
Values	6	3	1	0	6	4	2	4	3	1	0	0	1	0	0	4	0	5	1	5
Positive criteria codes	0	0	5	0	0	0	0	0	0	4	0	0	0	1	2	0	0	0	1	3
Nr	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Personification	-4	-2	-1	1	4	-6	8	-1	2	-2	-4	6	4	5	-2	-3	1	-1	-2	2
Values	1	3	1	0	0	0	0	0	2	0	2	4	0	1	0	0	0	2	1	2
Positive criteria codes	0	0	0	0	2	0	3	0	0	0	0	0	0	1	0	0	0	0	0	2

Personified values and criteria codes in 2004

Attitudes based on personified values, shown by presence of criteria indicators, are seen only in 6 cases of 40 in the 2004 documents Table 10). They are present in documents 3, 10, 19, 20, 34, 40. Table 11 shows similar data from the 2007 documents.

Personified values and criteria codes in 2007

Nr	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Personification	-1	-3	3	-1	0	7	0	7	-4	1	2	4	2	11	4	3	-1	4	9	-5
Values	2	4	0	2	2	1	0	1	1	3	0	1	3	2	0	1	2	3	3	1
Positive criteria codes	0	1	0	0	0	3	0	1	0	0	0	1	2	1	0	1	1	4	2	0
Nr	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Personification	2	4	-1	3	-2	-1	-1	2	2	5	3	-8	1	8	0	1	1	2	-1	1
Values	3	3	1	1	9	7	2	1	6	3	2	1	0	8	4	0	4	4	4	3
Positive criteria codes	2	4	0	0	0	1	2	0	0	0	2	0	0	1	0	1	1	1	0	0

Attitudes based on personified values, and presence of positive criteria indicators are seen in documents 6, 8, 12, 13, 14, 16, 18, 19, 21, 22, 31, 34, 37, 38 (14 documents).

Study of the 2011 documents shows that attitudes based on personified values, and presence of criteria indicators occur more frequently (see Table 12).

Table 12

Nr	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Personification	1	0	0	2	0	0	0	1	1	3	1	0	1	2	1	0	3	4	2	0
Values	1	5	0	1	1	1	3	0	1	2	0	2	2	5	1	0	1	1	1	1
Positive criteria codes	-1	-10	1	-1	2	-2	-4	-2	2	-2		1	5	3	-1	3	2	0	3	1
Nr	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Personification	0	4	1	2	0	1	1	3	1	2	0	5	7	1	2	3	3	0	4	1
Values	6	6	3	1	5	2	4	3	4	5	5	3	8	1	2	1	3	3	3	2
Positive criteria codes	-3	5	2	1	-3	3	7	3	4	5	-2	2	12	1	2	2	4	1	9	3

Personified values and criteria codes in 2011

They can be seen in documents 9, 13, 14, 17, 19, 22, 23, 24, 26, 27, 28, 29, 30, 32, 33, 34, 35, 36, 37, 39, 40 – 21 documents.

Thus we can see that the formation of world view (weltanschauung) is in process, as the documents show presence of attitudes based on personified values towards self, nature, society. Also it must be noted that the 2011 and 2007 documents show more signs of a formation of world view than the 2004 documents (see Table 4).

Table 13

Year	Personification, positive criteria indicators and values (number of documents)	Values not mentioned (number of documents)
2004	6 (15%)	16 (40%)
2007	14 (35%)	6 (15%)
2011	21 (53%)	4 (10%)

### Components of world view in the documents

The increase of frequency of personification is characteristic of a trend in the young people to study and discover the themes of the essays involve themselves personally and connect them with their experience and life. The young people try to formulate their attitude towards the world and understand their place in it. The not personified documents and irregular personification show that this wish is not conscious and is not supported by relevant skills.

Criteria indicators of positive attitude towards self, nature, history are found more often in documents of 2011 than 2007, and more frequently in the latter than in those of 2004. in 2011, we have 2 documents that have all three positive code indicators, while in 2007 there are only one document, and 2004 has no documents at all. This could mean that there is a growing interest of themselves in the youth, and they try to understand the processes of the self, nature and society, which is a part of the world view.

Most of the documents show that values are a core to the world view. Yet no values have been mentioned in 40% of documents in 2004, 15% of cases in 2007, and 10% of cases in 2011.

The 2011 and 2007 documents show values that are important for young people of this age, and influence their life directly, as friendship, love, family, trust, sympathy.

In 2011 and 2007 documents the presence of personified values is more distinct than in 2004 documents (20 documents or 50% cases vs. 9 documents or 23% cases), which shows a formation of core world view.

The process of formation of world view is more distinct in 2011 documents compared to 2007 and 2004 documents (21 documents or 53% cases vs. 14 cases or 35%, vs. 6 cases or 15%), the documents show a personified positive attitude towards self, nature, society. The presence of values, increase of personification levels, presence of the positive criteria indicators show that the young people are more deeply involved in the study processes, interested in reflecting on issues and values they find important. Yet the frequent, howbeit decreasing inconsistencies or lack of personifications, attitudes of

alienation, documents that do not mention any values, still encourage research of development of personality development of vocational school students.

# Conclusions

- 1. World view (weltanschauung) contains personal attitudes, based on values; this is revealed through personification.
- 2. Growing levels of personification can be seen among the components of world view in the results of study of documents in 2004, 2007 and 2011.
- 3. The progression of coherency of personified values and positive indicators of criteria confirms that there is a formation of world view as a unified system of views (about self, nature and society), based on personified values.
- 4. Values, increased levels of personifications and positive indicators of criteria point to the young people being personally involved in the study process, interest and reflections on issues and vales they find significant.

# References

- 1. Berger P. L, Luckmann, T. (1967) The Social Construction of Reality: A Treatise in the Sociology of Knowledge. New York: Anchor Books, 1967.p.5-216
- 2. Foucault, M. (1970) The order of Things: An archaeology of human sciences, World of Man, New York: Random House, p. 168
- 3. Hegel, G.W.F. Aesthetics. Lectures of fine art.Vol.1. Chapter 6. [online][15.11.2011] Available at <u>http://www.marxists.org/reference/archive/hegel/works/ae/contents.htm</u>
- 4. Heidegers, M. (1998) Malkasceļi (Holzwege) Rīga: Intelekts, p.59-83.(In Latvian)
- 5. Huserls, E.(2002) Fenomenoloģija.(Phenomenology) Rīga, FSI, p.336-366; 399-420.(In Latvian)
- 6. Kroppendorf, K. (2004) Content Analisis. London, SAGE Publications, p.81-95
- Naugle, D. K. (2003) Worldwiev. The history of a concept. Grand Rapids, Michigan, p 82-97,174-178
- 8. Materials of the state exam of the Latvian language and literature (2004) ISEC
- 9. Materials of the state exam of the Latvian language and literature (2007) ISEC
- 10. Materials of the state exam of the Latvian language and literature (2011) VISC
- 11. Weft QDA [online][03.03.2011] Available at http://www.pressure.to/qda/

# PROBLEM-BASED LEARNING IN STUDENTS' REFLECTIVE PRACTICE AT THE UNIVERSITY STUDIES

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**Abstract:** The purpose of this article is to reveal the problem–based learning in students' reflective practice at the university studies. The tasks of the article are to discuss the aspects of the problem–based learning and to analyse practice participants' opinions on problem-based learning, checking five models (of problem-based learning) in students' reflective practice at the university studies.

The research highlights the nature of the problem–based learning: the aspects of epistemological competence, professional action, interdisciplinary understanding, trans-disciplinary learning and critical contestability. The research approves important roles of students and facilitators in the problem-based learning at the university studies. It's important to mention that all five models of problem-based learning are important in students' reflective practice.

**Keywords:** *problem-based learning, reflective practice.* 

## Introduction

The concept of problem-based learning is defined in literature. In Lithuania it was discussed by the authors Šveikauskas (2005), Mažeikienė, Lenkauskaitė, (2011) and etc. However, not much attention is paid to challenges arising from the use of this learning method. Complexity and adaptability of this type of learning during students' reflective practice have not been analysed widely enough (Savin-Baden, 2000). This article is based on Savin-Baden logic about five models of problem-based learning.

The aim of this article is to reveal the use of problem-based learning for students' reflective practice during university studies. The following tasks are important for the achievement of the aim: to discuss aspects of problem-based learning; to analyse practice participants' opinions on problem-based learning.

The first step is to answer the question what problem-based learning means during reflective practice. In order to answer this question the aspects of problem-based learning are discussed.

When discussing the concept of problem-based learning, it is important to understand where (in what position) learners are and what learning methods they use when studying at a higher education institution. It is important to understand how students learn, how they grow and develop as future professionals. When looking for answers to these questions, it is important to take into consideration both personal students' expectations and educational requirements that learners face during problem-based learning.

The second step is to identify whether the theory of problem-based learning works or does not work in practice. Problematic situations are modelled in practice places; this helps to prepare learners to be not only theoreticians but also effective practicians.

Problematic scenarios "appear" within the boundaries of every discipline. Solutions to modelled problematic situations are related in their content. Students are expected to find answers to problematic questions after the analysis of specialised literature.

### The Concept of Problem-based Learning

## Materials and methods

The analysis of academic literature and qualitative phenomenological research were the methods of the research. A semi-structured interview was used in this research. Five models of problem-based learning, seen in the Fig. 1, were the theoretical fundament to make the questions for the semi-structured interviews. Participants of the research were eleven students from Vytautas Magnus University in Lithuania.

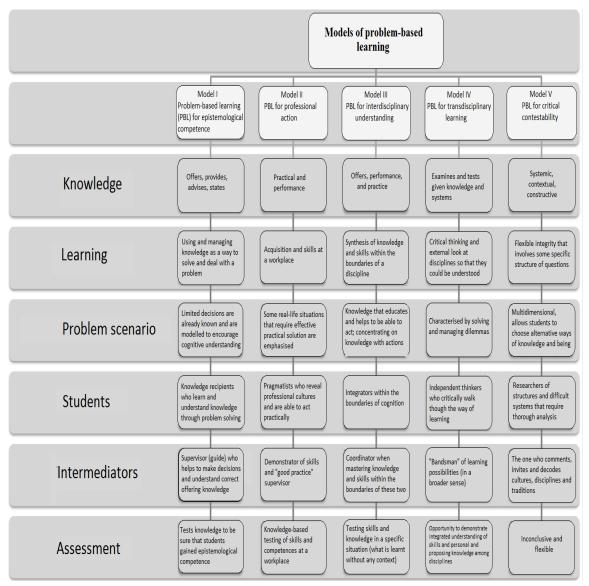


Figure 1. Models of problem-based learning (adapted according Savin-Baden, 2000).

Problem-based learning and problem-solving learning differ. Problem-solving teaching has been a usual way of teaching for a number of years. For example, students attend a lecture and have to answer questions after that; or they answer questions after reading an article. Problem-based learning differs as attention here is given to a problem scenario itself rather than a subject or a discipline. Students work in groups or teams and analyse a problematic situation; however they are not expected to provide answers to questions. Instead of providing answers learners are expected to get acquainted with a complex situation and to decide what situation is useful and what skills they need to be able to manage this modelled situation effectively.

Problem-based learning can be used differently; however, main philosophies rely on studentcentred methods. When applying student-centred methods, learners are provided with a wide spectrum of information to be analysed in order to join learning and students' needs for development.

This way of learning is flexible and diverse. It can be used in a variety of disciplines when learning different things or during practices as a problematic scenario rather than a discipline itself is taken into consideration here.

### Model I

This model is characterised by knowledge that conveys something. Students are expected to use gained knowledge when solving problems. In this model, knowledge is characterised as unquestionable; problem solution is understandable to personnel and is specific to students. Problem-

based learning is used to help students to understand content. Problematic situations are seen as ideas that help students to learn through understanding, management and systemisation.

In practice, problem-based learning is revealed in the sphere of different disciplines (economics or engineering etc.) while a problematic scenario is based on key conceptions that students should be aware of. This model has a number of constituent parts characteristic to problem-based learning. Model I is unique for the fact that problem-based learning is used to enable students to develop skills of problem-based learning so that they were able to apply knowledge in solving problems and so that professional practice could be used to test what students were able to learn.

However, problems can arise in a programme of problem-based learning. Some tutors expect students to master a programme step by step and to go through the course thoroughly and in depth while other tutors look at this process creatively and allow students to find answers themselves. In this case learning will be a process during which it is important to coordinate knowledge that helps to solve problems and schedule planned by a tutor. Of course, all this also depends on a learner's personal experience, on useful information learnt during a course and on read literature. All this leads to correct answers. Learner's experience is also important to other group members as secondary after course books and articles written by experts and teacher's perspective.

During this learning process students will try to find an answer through the use of knowledge that offers something; that is how they will look for a solution to problems and questions. Content is delivered irrespective of learners themselves. Students describe themselves as recipients of knowledge who think over received information. Learners think over knowledge received from experts and use problem-based learning to improve their understanding, as well as relate theoretical knowledge and its practical use. During this process students are seen as knowledge recipients.

In a majority of cases tutors will ignore difficulties faced in groups so that students raised problematic questions themselves. When this model is used, tutors are facilitators who lead a student to tools, right answers and help to find ways to control situation.

Information recall and reproduction pedagogy is characteristic to this model. It is illustrated by assimilation and recall of information that students receive from teachers and by entirety of strategic pedagogy that is symbolised by academic schedule and adaptation to what is expected in accordance with an academic plan.

That is how students will choose the most appropriate way for them to assimilate this course. This can mean that during this course students will work individually which could mean that individual work is less frightening than work in pairs where it is more difficult to acknowledge failure. Individual work can also take place when a student is more advanced than other group members. Students who aim to assimilate knowledge that offers and provides something will help other group members. That is how they will transfer knowledge and transform it into knowing. When working in pairs, students will together perform assessment and use previous experience, as well as develop confidence and renew knowledge. That is how they will learn and move forwards.

# Model II

This model of problem-based learning is characterised by a conception and understanding "to know how". Action is important and characterises a programme. In the process of this model of problem-based learning, students learn how to solve problems and how to develop an ability to apply this in different problematic scenarios and situations. Thus students learn to think critically. Students use knowledge that offers something and learn how to use it at a workplace and how to use skills in any situation.

This type of model comes from a study course related to public and private industry influenced by a labour world. For example, business studies, social work or occupation therapy. Such bachelor courses as law are less influenced by this concentrated learning aimed at performing professional actions.

Skills are important here at university level. It is a common misperception that identical skills will be used in a labour world. With help from tutors, students are expected to make a certain transition. Students learn to act in specific situations. Team work, introduction, and solving problems help to gain new skills. It is important for students to understand what a professional and professionalism mean.

Thus learners should learn how to behave in specific situations. Thus in this type of problem-based learning, importance goes not to entirety of knowledge but to what should be transferred, what skills should be transferred and how this meta-transfer should be performed. This will be important for assurance of this type of teaching programmes so that skill-based learning does not become behavioural teaching where practical learning can contradict tests. A simplified learning method used in clinical laboratories where skills are developed separately and not in environment where abilities could be used can be taken as an example here. In such programmes more attention is given to value of use and less attention is given to depth of a subject, to professional decisions or personal opinion. Dangers of this model are that problem-based learning is used as a mechanism for developing a narrow "package" of skills. Students can also feel that things that they learn do not relate to other forms of knowledge. For example, too much attention is given to communication skills and teamwork; student involvement and reflection (relating it to theory and researches) are not encouraged. All this can lead to implicit student's adaptation and agreement to a tutor's opinion and management. This type of learning will not help students to understand that they may need other team work skills at a workplace compared to what they were taught at university. Skills and knowledge how to perform are important; however, in this case of problem-based learning both general understanding about skills and knowing how to do that. They are closely related to cognitive content and to making professional decisions.

# Model III

This model of problem-based learning distinguishes between "to know how" and knowing that offers something. Problem-based learning becomes a tool that relates "knowing how" and "knowing that" and a certain means of communication between subject knowledge and a programme. During practice personnel tries to help students to understand "interdisciplinary". They help to perceive knowledge that offers something and use meta-skills in a labour world and academic learning contexts.

Barnett (1994) stated that interdisciplinary learning is impossible as defective and changed axioms are used. However, this argument is more complex than just to decide that interdisciplinarity is not effective. Disciplines extend their boundaries and get stronger. That is how personnel are expected to stay in a labour market. Sometimes programmes are complex and wide as universities decide to educate wide-profile specialists.

Nursing can be taken as an example here. A group of people (personnel) tries to support interdisciplinary understanding during problem-based learning. Workers' aim is to enable students to coordinate different subject knowledge, to join all the knowledge that they had learnt as individuals into a group learning process. Thus problem-based learning will be oriented more towards students' ability to understand and synthesise information rather than towards going into it. Personnel want students to understand physiology, learning psychology and to be able to use computerised programmes. Students should also be able to use knowledge in practice. For these personnel problem-based learning is ideal way to educate students.

Other disciplines and knowledge that offers something are at the centre of this model. Thus students are provided with a large amount of knowledge; however, all this is done theoretically and "isolated" from reality. Those students who use problem-based learning scenarios to clarify unclear things themselves can better memorise and relate knowledge.

When this model is used, a student works, learns a subject and other disciplines. When learning different subjects, students understand that these subjects are interrelated and it is important to find and reveal these relations themselves. Disciplines are related and that is why it is important for students to understand this relation. Learning in this model is seen as knowing and understanding disciplinary knowledge and relations between knowledge. All this is useful both individually and pedagogically. This kind of problem-based learning relates disciplinary knowledge that offers something and learner's individual position. Students are enabled not only to formulate epistemological attitude but also to relate theory and practice. All this connects "knowing that" and "knowing how".

## Model IV

When this model of problem-based learning is used, students can recognise boundaries among disciplines. However, these boundaries are made-up and imaginary. A student can cross these boundaries; however, it is difficult to understand where that boundary between disciplinary knowledge is. According to Popper (1959), thinking (presumably, action and experience) occurs in certain frames and is a system. However, it is not always limited to a system. Barnett (1994) states that rules that perfectly suit for one discipline cannot be used for another one. The nature of structures differs. When one of them is violated another changes too. All links that relate these systems change and become problematic. In this model, boundaries among disciplines are not violated. Knowledge and skills are within the boundaries of a subject; students only get acquainted with other disciplines and do not cross their boundaries.

Students learn more by themselves. Pedagogical autonomy can be felt here. Students make independent decisions on how they learn. A student learns decentralised and does not try to cross boundaries of a discipline. Being open to others, reflection and self-evaluation are important here. Things that a student already knows are connected to things offered by theory. Theory and practice are linked within the boundaries of a discipline.

In this model of problem-based learning, students are encouraged to take critical attitude towards knowledge, themselves, and their group, to use problem-based learning group and in this way to check and test personal and pedagogical boundaries. When using this model, students will grow both autonomously in a group and as a group. Students solve dilemmas and find meanings within a group. Assistant in this model is a "bandsman" of possibilities.

Dangers of this model lie in the fact that students are left alone as assistants think that there is no need for them to interfere in group work anymore. At that time a group may move towards criticality and this negatively affects both students themselves and group processes; work quality suffers; a group does not receive good-quality feedback.

In this model, students start thinking critically, learning autonomously, using multiple methods that help to link knowledge. Students themselves critically look at the limits of cognition within the boundaries of a discipline. Overlapping boundaries do not indicate that subjects are joined into one unit. Students will be able to distinguish what helps them in the process of problem-based learning.

# Model V

Problem-based learning is applied in many spheres. A need to help students to manage their learning increased with the increase of number of scientific resources in this age of technologies and modernisation. Personnel think that the reason behind this also is willingness to help students to develop critical thought that they could use when faced with multidimensional problems. This type of thinking depends not only on combination of "know that" and "know how" but also on the context of situation where a problem arose. Problem-based learning in this case is a form of learning where students are expected to be provided with this type of higher education knowledge through study programmes that offer multiple activity models, knowledge, causality, and multiple (repeated) reflections together with students' possibilities to accept challenges, to assess and to question. Students research structures and systems both at discipline level and in a professional field.

# Practice Participants Thoughts about the Problem-based Learning

### **Results and discussion**

The study revealed that eleven students, the participants of this research during their practice are applying these methods of learning: individual learning at home, individual and group learning in the practice place, individual and group learning in the reading room.

The participants expressed their attitudes towards knowledge, learning, problem scenarios, students, agents and evaluation of problem-based learning. Responses of the participants and their distribution are shown in the Table 1.

Table 1

Participants' Thoughts about the Problem-based Learning	Participants	' Thoughts about	the Problem-based	Learning
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Scenarios	Criteria	Evidence of Statements	Number of Statements
Transmission of	Knowledge	Performance and practical knowledge;	10
information	Ŭ	Providing knowledge;	5
during practice		Offering knowledge;	4
uning province		Advising knowledge;	3
		Constructive and contextual knowledge;	2
			2
		Examining;	
		Testing;	2
		Claiming;	2
		Systemic;	1
		Theoretical, but useful for future studies and potentially the workplace;	1
		Updating information on practices;	1
Presence at	Learning	The use and handling knowledge so that one can	6
practice	Leannig	solve the problems;	
		Learning and skills in the workplace;	4
		Critical thinking and look at the things from the side, better understand it;	4
		Synthesis of knowledge in discipline and skills;	2
		Flexible integrity, which includes the structure of certain issues;	2
Operation during	Creation of the		7
Operation during		Fostering knowledge and support to be able to	/
practice	problem	operate, focusing on the knowledge of the operation;	
	scenario	Emphasis on real life situations that require effective	
		practice solutions;	6
		Multidimensional, offering students alternative	
		knowledge and the existence of several choices;	3
		<i>Limit solutions are already known and are modelled</i>	5
			2
		to promote cognitive understanding;	Z
		Characterized by dilemmas and management	
		solutions;	1
Participation in the practical	Action	Independent critical thinkers, taking part in learning; Pragmatists, demonstrating a professional culture	6
process		that can operate in practice;	4
1		Researchers of the structures and systems;	4
		Recipients of knowledge, and learning to understand the knowledge through problem solving;	3
Madiation process	Dortnorship		0
Mediation process	Partnership	Mentoring;	9
in practice		Tutoring;	6
		Cooperating with the fellows students;	6
		Practice with local workers;	6
		teachers;	6
		librarians;	1
Assessment	Reflection	Verification of skills and knowledge in given	4
practice		situations;	
		Opportunity to demonstrate an integrated understanding of skills, personal knowledge and	3
		stating that in the frame of the subject;	3
		Open-ended and flexible process;	2
		Skills and competence testing in the workplace, based on knowledge;	_
			1
		Testing to make sure that students have	1
		epistemological competence;	

Discussing about knowledge, students emphasized the performance and practical knowledge. Such knowledge is characteristic learning according the second model, which focuses on professional action.

It was also mentioned the providing, offering and advising knowledge, dominating in the first model. The participants discussed about the examining, testing, constructive and contextual knowledge, used in the fourth model for interdisciplinary education and the fifth one used for critical debates.

Students define the learning used in the reflective practice as the usage and management of knowledge to solve problems. As well as learning and skills in the workplace critical thinking and look at the matter from the side to understand it better, synthesis of the knowledge in discipline and skills, the flexible integrity of the components, including questions' structure are used. Arguments show that all five models of problem-based learning, complementing each other, are used in this process of learning at practice and it depends on the type of practice.

Discussing about problem scenario in the place of practice students mentioned fostering knowledge and support to be able to act, emphasized the real life situations, the importance of the alternative knowledge. Less number of students mentioned known limited solutions modelled to promote cognitive understanding and problem scenario, characterized by resolving and managing problem dilemmas. These answers are typical for the first, second, third, fourth and even fifth model of problem based-learning.

Students about participation in the practical process discribed themselves as independent critical thinkers, pragmatists, researchers and recipients of knowledge. The mentioned roles are important in the first, second, fourth and fifth models. The participants didn't mentioned their action as intergrators across boundaries, important for interdisciplinary understanding in the third model.

Discussing about mediation process in practice, participants mentioned the important role of mentors, tutors, teachers, local workers, the other students and even librarians. Such partnership helps students in problems – based learning.

Speaking about assessment practice students descibed it as verification of skills and knowledge in given situations; opportunity to demonstrate an integrated understanding of skills; personal knowledge and stating that in the frame of the subject; open-ended and flexible process; skills and competence testing in the workplace, based on knowledge and testing to make sure that students have epistemological competence. The mentioned statements reflect the first, second, third, fourth and the fifth models of problem-based learning.

According Savin-Baden (2000), the fifth model of problem based learning is an ideal one, sometimes used as an exception. This research confirms that such exception is enough reliable in students' reflective practice. All five models of problem-based learning are used in students' reflective practice.

# Conclusions

Analysis of literary resources has shown that there are five conceptual models of problem-based learning: for epistemological competence; professional action; interdisciplinary understanding; transdisciplinary learning and for critical contestability.

Analysis of research data has shown, that:

- each of five models of problem-based learning are important in students' reflective practice;
- the statements of the participants confirm the nature of the problem–based learning in the reflective practice: the aspects of transmission of information during practice, the presence at practice, operation during practice, participation in the practical process, mediation process in practice and assessment practice;
- the research approves important roles of students and facilitators in the problem-based learning at the university studies: the roles are important in all five models of problem-based learning in students' reflective practice;
- the criteria of knowledge, learning, problem scenario, action and reflection are fundamental talking about the participants' opinion about problem-based learning;

• the research helped to determine that performance and practical knowledge; using and handling knowledge so that one can solve the problems; fostering knowledge and support to be able to operate, focusing on the knowledge of the operation; emphasis on real life situations that require effective practice solutions; verification of skills and knowledge in given situations; opportunity to demonstrate an integrated understanding of skills, personal knowledge and stating that in the frame of the subject,- are most important statements for the participants in the problem-based learning.

# References

- 1. Barnett R. (1994). The Limits of Competence. Buckingham, Open University Press, SRHE.
- 2. Mažeikienė N., Lenkauskaitė J. (2011). *Probleminis mokymasis aukštojoje mokykloje*. (Problem-based learning in higher education), ŠU leidykla, Šiauliai, Lietuva, 146 p.
- 3. Popper K.R. (1959). The Logic of Scientific Discovery. Routledge, London, UK, 479 p.
- 4. Savin-Baden M. (2000). *Problem-based Learning in Higher Education: Untold Stories*. Buckingham: The Society for Research into Higher Education and Open University Press, 161p.
- 5. Šveikauskas V. (2005). *Probleminio mokymosi ypatybės studijuojant mediciną*. (Problematic features of studying medicine), Medicina. Nr. 41, Lietuva, p. 885-891.

# FACTORS HINDERING THE PROCESS OF SEARCH FOR JOBS

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**Abstract:** Employment problems in Latvia became topical after an economic and mental crisis began in Latvia in 2008. Labour is one of the most significant factors affecting the life quality of individuals and also their health. The paper includes research results on the problems and needs of the unemployed in the process of search for a job. The research object is search for jobs at the Jelgava Department of the State Employment Agency (hereinafter – the SEA), and to achieve these goals, a survey of customers was conducted. The goal of the survey was to ascertain the reasons and features of character of customers that hinder a successful search for a job as well as opinions of individuals and whether they are informed about available services of a career consultant at the SEA Jelgava Department. In the survey, the reasons that hinder a successful search for a job were found out, as well as the problems and drawbacks that hinder a successful process of search for a job were identified and the present situation was assessed. In the result, it was concluded that the process of successful search for a job requires active cooperation of the unemployed, and assistance of a career consultant is also necessary.

Keywords: employment, career, unemployed individual, job, career consultant.

# Introduction

Section 106 of the Constitution of the Republic of Latvia stipulates that "everyone has the right to choose an occupation and a workplace according to his/her abilities and qualification", therefore, employment and problems of unemployment, during this crisis, are urgent not only to the state, enterprises, but also to residents themselves not only to provide for their families, satisfy basic needs, but also to successfully make their career, implement their abilities, and gain a sense of fulfilment, which reversibly affects family life and human relations and health. There are five interrelated areas of life for individuals to which a significant extent of time, energy, duties, and attention has to be dedicated, and a key to successful life is an ability to balance all these five areas of life:

- labour (it is important that individuals do a job that provides both a sense of moral fulfilment and financial stability);
- family (family life is one of the most significant areas of human life, therefore, it is of great importance that it is tailored according to an individual's wishes and needs);
- mentality (time and activities individuals dedicate to their mental development and self-perfection);
- civil society (a need to be part of society time and energy spent on other individuals, the environment, and the state);
- leisure time (leisure time and various hobbies provide opportunities to individuals to implement their interests that may not be implemented at work). (Karjeras jomas, 2004)

Obtaining the status of the unemployed is stipulated in Section 10 of the Support for Unemployed Persons and Persons Seeking Employment Law of the Republic of Latvia; it states that an individual has the right to the status of the unemployed after being registered at the State Employment Agency and:

1) who is not working (is not deemed to be an employee or self-employed in accordance with the Law on Social Insurance);

- 2) who is seeking employment;
- 3) who is capable of work and is ready to enter into employment relationships without delay;
- 4) who has reached the age of 15 years;
- 5) who has not reached the age necessary for the granting of the State old age pension;

6) who is not acquiring an education by being present at a general secondary or vocational secondary education institution, except for night school;

7) who does not perform commercial activities or for whom commercial activities have been suspended in accordance with regulatory enactments;

8) who is not completely State supported.

A disabled person, according to the law, is regarded as an individual capable of work, except if a physician expert commission for health and capacity for work has established a 100 percent loss of the individual's capacity for work. If an individual is temporarily incapable on the day of registration, the State Employment Agency grants the status of the unemployed to this individual after the individual's temporary incapacity is over (the Support for Unemployed Persons and Persons Seeking Employment Law of the Republic of Latvia).

## Materials and methods

In November 2011, a survey was conducted at the SEA Jelgava Department to find out the problems and needs of the unemployed in their search for jobs.

In the survey, 83 respondents participated. Of them, 25 were long-term unemployed (out of job for more than 12 months), the others were short-term unemployed; 53 were women and 30 were men. The research object is search for jobs. The research aim is to investigate the problems and needs of the unemployed, registered at the SEA Jelgava Department, in their search for jobs.

The research tasks were set as follows:

- to make a theoretical discussion on the problems and needs in search for jobs,
- to analyse the opinions of the unemployed on problems faced in the process of search for jobs.

To achieve the research aim and complete the tasks, the legal framework and official information were used. To study the legal framework and make proposals for its improvement, the general research methods – abstract and logical, monographic, and calculation and constructive methods as well as analysis and synthesis – were employed. To process statistical data, the following statistical methods were used: descriptive statistics and analysis of causal relationships. To find out problems and needs of the unemployed in their search for jobs, a sociological research method – questionnaire surveying – was employed.

### **Results and discussion**

According to A. Maslow's theory, the basic needs are the same for both men and women, and people are not able to live without satisfying these needs. The basic needs of people are physiological needs (breathing, food, water, clothing, physical development, recreation) and safety (life, health, guarantee to satisfy physiological needs). Satisfying these needs ensures the physical existence of people. In Maslow's hierarchy, higher level needs are human social needs: friendship, love, and a position in society, followed by esteem needs: self-esteem, confidence, achievement, and respect by others, then followed by self-cognitive needs: information regarding oneself, nature, other individuals, and society and esthetical needs: beauty, order in nature and society. The highest needs in the hierarchy are self-actualisation needs: self-expression, implementation of the positive potential of personality, and creativity. All these needs became apparent in communication among people and affect their contacts. Unsatisfied needs are the strongest motive of human behaviour. Among all other kinds of human behaviour, unsatisfied needs influence the communicative behaviour of people, too, and people try to get satisfied by means of human contacts. To satisfy the basic needs, people need a job, and in case of unemployment, especially if it lasts for a long period, satisfying human needs is endangered starting with the lowest level; therefore, the other levels of needs are not satisfied and relations with other individuals are traumatised, which affects the whole society in the same way as a chain reaction occurs (Omārova, 2002).

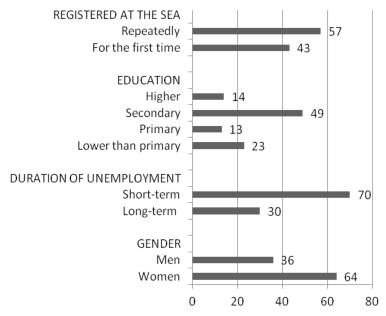
A job determines the lifestyle of people, the way people are dressed, whom they are friends, as well as financial conditions, respect, viewpoints, and values of people. A job may provide enjoyment to people, promote their personality development and self-actualisation, as well as become a cause of dissatisfaction, unsafety, and inferiority (Svence, 2003).

The paper includes the survey results on the problems and needs of the unemployed in the process of search for a job. The research object is the search for jobs by the unemployed registered at the SEA Jelgava Department, and to achieve these goals, a survey of customers was conducted. The goal of the survey was to ascertain the reasons and features of character of customers that hinder a successful search for a job as well as opinions of individuals and whether they are informed about available services of a career consultant at the SEA Jelgava Department. In the survey, the reasons that hinder a successful search for a job were found out, as well as the problems and drawbacks that hinder a successful process of search for a job were identified and the present situation was assessed and recommendations for its improvement were made. Respondents were selected randomly among customers of the SEA Jelgava Department. The customers were surveyed in September of 2011, and 83 valid questionnaires were received. The data were processed in MS Excel, using a method of grouping.

Characteristics of the respondents. After analysing the respondents' age and gender, it was found out that women were the most active – their proportion was 64%, while men accounted for 36% among the respondents. An analysis of the respondents' age distribution, according to the data, showed that the youngest respondent was 17 years old, whereas the oldest one was aged 61; an average age was 40 years, and the range of age reached 44 years. The number of observations totalled 83.

The largest part of the respondents, i.e. 49%, had secondary education, 23% of the respondents had lower than primary education, and 14% had higher education, while 13% had primary education.

Of the respondents, 43% registered themselves at the SEA for the first time, while 57% did it repeatedly. The long-term unemployed accounted for 30% of the respondents, which means that they are out of job for more than 12 months (Fig.1).

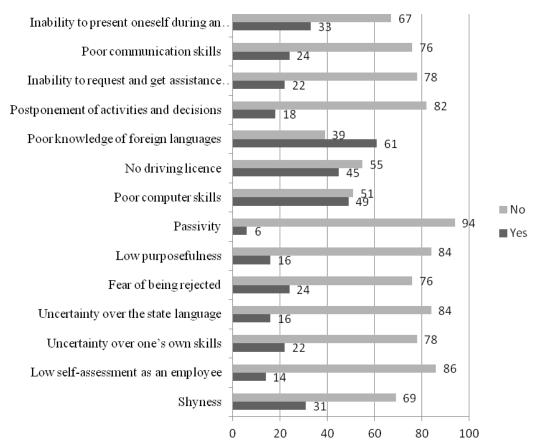


Source: author's construction based on the survey data

# Figure 1. Socio-demographic profile of the respondents (%)

According to the respondents, the following drawbacks or problems in the process of search for jobs were mentioned most often:

- poor knowledge of foreign languages 61%;
- poor computer skills 49%;
- no driving licence 45%;
- inability to present oneself during an interview 33%;
- shyness 31% (Fig.2).



Source: author's construction based on the survey data

# Figure 2. Drawbacks or problems mentioned by the respondents in their search for a job (%)

The respondents were asked a question whether they are ready to change their occupation or speciality; 66% of them gave an affirmative answer, while 34% were not ready to change their speciality.

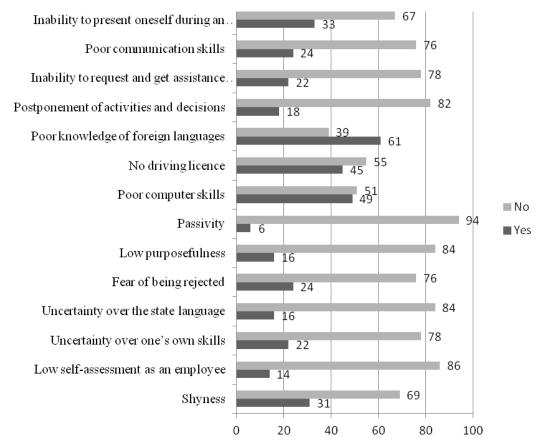
Some questions were included in the survey to find out whether customers are informed about available services to exclude a probability that one of the reasons is lack of information. It was asked whether they are informed that services of a career consultant are available at the SEA Jelgava Department; 75% of the respondents said yes, whereas 25% did not know it. The respondents were asked a question whether they know that seminars and lectures are delivered at the SEA Jelgava Department. The following seminars and lectures were most frequently mentioned by the respondents:

- how to effectively find a job 82%;
- evaluation of a job offer 70%;
- how to prepare for a job interview 69%;
- overcoming a psychological barrier in the process of search for a job 64%;
- communication and problem-solving capabilities 61%;
- stress and its overcoming 59%;
- developing skills in working under changeable conditions 55%;
- conflict and effective communication 51%.

Since Section 14 Duties of the Unemployed, Support for Unemployed Persons and Persons Seeking Employment Law, stipulates that the unemployed have to participate in activities scheduled in their individual job search plans as well as to attend competitiveness increase activities, one can conclude that the unemployed are informed about the services offered. Insufficient knowledge of the official language may be mentioned as one of the reasons why the respondents were not informed about these services; as a result, they were not able to comprehend available information.

In the survey, an important question was included – what services of a career consultant are needed to a respondent to successfully find a job. According to Fig.3 the following services are needed most frequently:

- search for a job with the help of a consultant 58%;
- identification of one's own professional abilities 49%;
- identification and choice of the most appropriate courses 48%;
- assistance to identify and define career goals 40%;
- adequacy of one's own features of character to requirements of a preferred profession 39%;
- assistance to prepare for an interview 35%;
- writing a motivation letter 35%;
- writing a CV, assistance to send a CV to an employer -33%;
- assistance to change one's career -12%.



Source: author's construction based on the survey data

# Figure 3. Necessary career services mentioned by the respondents (%)

A question was included in the survey whether respondents characterise their internal sense as a crisis; 63% gave a negative answer, while 37% admitted that it is true.

A Chinese hieroglyph for the word crisis combines two complementary concepts – danger and chance. A Greek word for crisis means judgement, as a crisis is a time when previous one's own actions are evaluated (Frīmens, Rubenis, 2010).

In psychological aspect, a crisis is a:

1) significant and painful change in a process;

2) difficult situation causing danger to the existence of people or their social system. Usually, all problems and contradictions became more acute during a crisis, and negative experiences are a factor specific to a crisis. During a crisis, complicated changes occur in motivation, attitude, and perception, which may be followed by a change in action. Changes cause negative emotional experiences. Their spectrum and range are very individual; however, changes usually bring concern, confusion, lack of self-confidence, and depression. Reflection, negative experiences, and changes are characteristic of crisis. Therefore, the unemployed who have been out of job for a long period describe their situation as a crisis, as their failures or inability to mobilise themselves for searching a job cause discomfort and a depressed condition.

A crisis in a career is similar to a professional development crisis caused by:

- processes related to the age of individuals the respondents mentioned it as one of the reasons for failing to find a job;
- destructions in professional development;
- during the early period of life, an identity crisis can cause a professional crisis, which becomes apparent as inability to choose a profession or continue studies; the survey showed that the largest part of unemployed individuals have secondary or primary education, which also influences the formation of a successful career;
- professional crisis may be associated with personal identity if an individuality is not able to objectively make a professional reorientation and is in contradiction to his/her former professional identity (Denzin, Mettlin, 1968);
- crisis may be caused by incomplete professionalization a small extent of certain knowledge to obtain a certain professional status (Denzin, Mettlin, 1968);
- crisis causes a situation in which a professional group is not ready to accept a particular individual (Volkova, 2005);
- emotional burning out is regarded as a professional crisis, as it becomes apparent as a change in attitude to a job and profession.

K.G. Jung emphasised that a constructive exit from a crisis is individualisation – self-development and self-formation; as a result, not only psychological balance emerges, but individuals also get rid of conformism regarding values of mass culture. Periods of change create problems to people also because they refuse to see how their life situation has really changed; in many cases, other individuals, circumstances, etc. are blamed for their problems. In a situation of deep crisis, individuals feel unhappy and misunderstood by others, and psychosomatic symptoms may emerge in individuals. Only then when individuals start analysing how their unhappy feeling is related to their life situation and start changing their attitude to the whole situation and its elements, including themselves, new qualitative changes might occur in their personality development. The level of hardships and complexity of crisis, in many cases, is affected by the attitude of individuals to themselves, other people, and the problem (Jung, 1996).

Changes occur in any case of crisis, which provides opportunities for development.

Prerequisites for successfully overcoming a crisis are as follows (Πεκ, 1996):

- 1) emotional flexibility, emotional support to children and their parents;
- 2) revision of life plans towards reality and stability;
- 3) understanding of limits of lifespan;
- 4) correction of lifestyle;
- 5) creation of a new image of oneself;

6) recognition of the existing situation as normal and such as leading to a new stability.

Reasons, mentioned by the respondents, hindering a successful search for a job are as follows nervousness; job application may be rejected due to the applicant's poor sight and wearing glasses; a little baby in the family; insufficient qualification; no document certifying the applicant's knowledge;

time spent on waiting for courses applied for; age; disability; care for a child hardly can be combined with a job; poor knowledge of the official language and a foreign language; health problems; no confidence in one's abilities; visual aspect; place of residence; place of a job; failures; lack of experience; lack of well-paid jobs; postponement of activities and decisions; availability of transport; no permanent place of residence.

# Conclusions

- Employment and problems of unemployment, during this crisis, are urgent not only to the state, enterprises, but also to residents themselves not only to provide for their families, satisfy basic needs, but also to successfully make their career, implement their abilities, and gain a sense of fulfilment, which reversibly affects family life and human relations and health.
- The drawbacks and problems, mentioned in the survey, in the process of searching for jobs by the unemployed are the poor knowledge of foreign language, poor computer skills, the lack of driving licence, the inability of presenting oneself during a job interview, and shyness.
- It was established, according the survey, that the following services of a career consultant are necessary to successfully find a job: search for a job with the help of a consultant, identification of one's own professional abilities, identification and choice of appropriate courses, and assistance to identify and define career goals.

# References

- 1. *Bezdarbnieku un darba meklētāju atbalsta likums* (2002). <u>(Support for Unemployed Persons and Persons Seeking Employment Law)</u>, [online] [01.12.2011]. Available at <u>http://www.likumi.lv/doc.php?id=62539</u> (In Latvian)
- Волкова О.А. (2005). Маргинальность профессионала как нарушение его идентичности. (Marginality of Professionals as the Interruption of their Identity). [online] [30.12.2011]. Available at <u>http://window.edu.ru/window\_catalog/files/r68104/sborn05\_2.pdf</u> (In Russian)
- 3. Denzin N.K., Mettlin C.J. (1968). *Incomplete Professionalization: The Case of Pharmacy*. [online] [30.12.2011]. Available at <u>http://sf.oxfordjournals.org/content/46/3/375.short</u>
- Frīmens L., Rubenis J. (2010). Krīzes iespējas. Meditācija kā dzīves līdzsvarošanas māksla. (Opportunities of Crisis. Meditation as an Art of Life Balancing). Apgāds Zvaigzne ABC, p. 9. (In Latvian)
- Karjeras jomas (2004). //Profesionālās karjeras izvēles valsts aģentūra. (Fields of Career), [online] [30.12.2011]. Available at <u>http://www.nva.gov.lv/UserFiles/File/kar\_jom\_makoni2.pdf</u> (In Latvian)
- 6. *Latvijas Republikas Satversme* (1933). (*Constitution*), [01.12.2011]. Available at <u>http://www.likumi.lv/doc.php?id=57980</u> (In Latvian)
- Miķelsone I., Strods G., Oļehnoviča E. u.c. (2008). Karjeras attīstības atbalsts. Izglītība, konsultēšana, pakalpojumi. (Career Development Support. Education, Advice, Services), VIAA, 321 lpp. (In Latvian)
- 8. Omārova S. (2002). *Cilvēks runā ar cilvēku*. (An Individual Talks to an Individual), Kamene, p. 113-114. (In Latvian)
- 9. Patton W. (Ed) (2006). *Carrer Development and Systems Theory*. [online] [01.12.2011]. Available at: <u>http://www.sensepublishers.com/catalog/files/90-77874-13-5.pdf</u>
- 10. Пек М. (1996). *Нехоженые тропы: Новая психология любви, традиционных ценностей и духовного роста.* (Unbeaten Paths: A New Psychology of Love, Traditional Values and Mental Development), Москва: Авиценна, 301 с. (In Russian)
- 11. Svence G. (2003). Pieaugušo psiholoģija. (Psychology of Adults), Raka, p. 29 (In Latvian)
- 12. <u>Юнг К.Г.</u> Структура психики и процесс индивидуализации. (Structure of Psyche and the Process of Individualisation), M., 1996.

# DIALOGUE' METHOD OF CAREER DEVELOPMENT FOR VOCATIONAL SECONDARY SCHOOLS

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**Abstract**: Article gives an insight into the necessity of dialogue' method in the careers development for vocational secondary schools' students. The last five years of Latvia' statistics indicate a highest unemployment rate of young people among others groups of society. Adolescence is most intensive time for learning, self development in order to their knowledge and skills to offer and to use in the labour market. One of the ways how to help to find a future plan of young people is to use dialogue' method, through which they can develop research and cooperative skills, occurs and gain new experience of meaningful learning.

Keywords: dialogue' method, career development, career counselling of vocational secondary schools.

# Introduction

On the dialogue we can see from different perspectives, which are characterized by **N.C.** Burbuless (1993), M. Buber (2000; 2002), J. Dewey (1916; 1997) etc. Based on these theories, we can discuss about importance of the dialogue in pedagogical relationship. P. Freire (1996) considers dialogue as an educational form. What happens between teacher and student? Is there a space where the teacher and student dialogue encounter, and if so, how it gets? When we are discussing these fundamental issues of pedagogical interaction, we must aware of the extremely complicated nature because it is involved in bilateral terms - teacher and student - and they are intertwined with each other, and naturally, that it derives its importance to socio-historical epoch as a whole, which are used. D. Dewey (1916) believes that learning should be exchange of experiences in which student presents self experience which interpreted on the basis of experiences of parent and /or teachers. Consequently, it is recognized that education is exchange of ideas; it is a conversation which belongs to a set of discourse.

At present in conditions of changing labor market for young people is essential to learn to assess their strengths and weaknesses, professional skills, abilities to define life goals. To do so is necessary for assistance of professional expert of career and education especially if targeted group is students of vocational secondary schools, since, as shown by the experience of these schools' teachers (Karjeras izglītība profesionālās vidējās izglītības iestādēs, 2006): students not always understood that they themselves can push own career in desired direction, rather than submit to conditions that occur in their life; they are still confused to sources of information on career opportunities; not acquired selfassessment and career planning skills; not always around them competent people who can give professional advice.

The above problems have been solved, if students receive support of career education and counseling in manner of various activities that is focused on students' self-cognition and self-development, career exploration and planning, which includes dialogue with themselves and dialogue with others. Issues of students' career development have been integrated into everyday learning process: in lessons of general and vocational subjects and extra-curricular activities, using by interactive teaching methods. It is important to provide students with group and individual counseling may help to solve their personal, social and educational problems, to find out appropriate place of practice and to promote further developing of career. Entering of young people in labor market begins with provision of practice place that is competence of each vocational secondary school; it is important long-term cooperation with companies and organizations that offer practice place and later job. But it is not always the potential employers are welcoming what shows the lack of constructive dialogue between vocational secondary schools and employer. A large proportion of students that are working in practice in companies are formed first work experience and communication skills with

their employer, to obtain ability to cooperate and work in new environments, as well as an understanding of the industry's labor market.

Taken by abroad studies the Netherlands, Sweden, Finland, Canada, USA, etc. of career dialogue in vocational secondary schools, confirms its effective use enables to learn creatively and to think untraditionally; develops the ability to correlate different skills and knowledge of their personality and career development, as well as give self-awareness of students, that their overall level of success will directly affect their well-being and competitiveness in further life.

Students' understanding of significance of their education and its link with own career development can provide a dialogue with competent teachers and / or qualified career counselors which are able to help students with advice, information and organize various types of consulting activities. One of the researchers in dialogue method P. Freire (1996) believes that dialogical teacher's main task is to investigate how students perceive and see the world; where they sees a major core of the contradiction; which contradictions are secondary, and how much they are aware these contradictions. In such a dialogue-based environment both teachers and students are teaching and learning all the time.

# Materials and methods

The article explores the theoretical cognitions of dialogue' methods in career development and evaluate foreign experience of career dialogue in vocational education. The methods applied in research are the study of corresponding scientific literature and description of the personal experience of the researcher.

Nature of dialogue method well-characterized Socrates phrase, "*I know that I know nothing*". Unlocking the dialogue, we learn, to know that do not know anything, because this method as a tool can be used only one who knows how to completely to abandon from own experience, because it will interfere in the dialogue, which foundation is development, personal contact, and other human rights and, above all, - that participants see, hear and feel each other.

According to M. Buber (2000) acknowledgment a genuine dialogue occurs only where each one of participants respect thoughts, concerns and experiences of other participants and where turn to each other in order to create a living relationship. Enter into dialogue means to think and reflect together, to notice another set perspective and explore new opportunities and it is difficult - at first to think together in relationship. It means that individuals can no longer take own position and thoughts as for granted; it is predict openness to other people's ideas and hearing of other people's perspectives. Dialogical relationships produce *I-thou* relationship where relate experience of one person to another person. It requires having regard for both self and other. *I-thou* is a relationship that stresses the mutual and holistic existence of two beings. It is a concrete encounter, because these beings meet one another in their authentic existence, without any qualification or objectification of one another. The opposite type of relationship is referred to as the *I-it* relationship whereas in *I-thou* the two beings encounter one another, in an *I-it* relationship the beings do not actually meet. Instead, the "I" confronts and qualifies an idea, or conceptualization, of the being in its presence and treats that being as an object. All such objects are considered merely mental representations, created and sustained by the individual mind. Therefore, the *I-it* relationship is in fact a relationship with oneself; it is not a dialogue, but a monologue.

Dialogue takes place between conscience-oriented thinkers as opposed to strategists. The conscience-oriented thinker will think in terms of a "good" outcome that maintains values and ethics, whereas a strategist will think in terms of achieving individual goals without concern for ethical practices. Persons who are engaged in dialogue will participate in what is called *narrow ridge communication* which refers to a common ground between parties. It is a point for participants to meet and share their views (Arnett, 1986).

American scientist N.C. Burbuless (1993) considers that successful dialogue involves cooperation at the same time accepted disagreements, confusion and incomprehension of participants. Overcoming these circumstances appears features of respect, trust and consensus what in the real dialogical environment tends to grow and to become stronger from the all communicating sides. It is a form of dialectics between feeling and thinking that increasing the long spiral leading to the specific of thought progress. Another important factor is the spirit of dialogue, which is characterized by research and questioning mood. It provides for the dedication communicative interaction with a view to *look at things* in order to reach a meaningful understanding and congruence between the participants. It has ability to create idea of primary interest, is bearing several long-term views.

The dialogue' method is an important component of individual education and personal development. Usually the dialogue' method is used where ongoing active learning. Prof. University of Oklahoma L. Dee Fink (2003) indicates that all learning activities involve some forms of dialogue: a *dialogue with self*; *dialogue with others* and two main directions of experience: *experience of doing* and *experience of observing*.

*Dialogue with self* happens when a student's thinks reflectively about a topic, i.e., they ask themselves what they think or should think what they feel about the topic, etc. This is *thinking about my own thinking*, but it addresses a broader array of questions than just cognitive concerns. A teacher can ask students, on a small scale, to keep a journal for a course or, on a larger scale, to develop a learning portfolio. In either case, students could write about what they are learning, how they are learning, what role this knowledge or learning plays in their own life, how this makes them feel, etc.

*Dialogue with others* does come in many forms. In traditional teaching, when students read a textbook or listen to a lecture, they are listening to another person, for example, teacher. This can be viewed as partial dialogue but it is limited because there is no back-and-forth exchange. A much more dynamic and active form of dialogue occurs when a teacher creates an intense small group discussion on a topic. Sometimes teachers can also find creative ways to involve students in dialogue situations with other people than students (e.g., practitioners, experts), either in class or outside of class or school.

*Observing* occurs whenever a student watches or listens to someone else *doing* something that is related to what they are learning about. This might be such things as observing one's teacher do something, or observing the phenomena being studied. The act of observing may be direct (the learner is observing the real action) or vicarious (observing a simulation of the real action). *Doing* refers to any learning activity where the learner actually does something, because by doing can learn just with our presence to participate in solving of study issues, or indirectly - through problem analysis, without the involvement of the same.

Each of the four modes of learning has its own value, and just using more of them should add variety and thereby be more interesting for the students; they supplement learning experience and give a new turn in mining of knowledge and experience. For example, if students write their own thoughts on a topic (*Dialogue with Self*) before they engage in small group discussion (*Dialogue with Others*), the group discussion should be richer and more engaging. If they can do both of these and then observe the phenomena or action (*Observation*), the observation should be richer and again more engaging. Then, if this is followed by having the students engage in the action itself (*Doing*), they will have a better sense of what they need to do and what they need to learn during doing. Finally if, after *Doing*, the students process this experience by writing about it (*Dialogue with Self*) and/or discussing it with others (*Dialogue with Others*), this will add further insight. Such a sequence of learning activities will give the teacher and students the advantage of the power of interaction (Fink, 2003). It is important to see the dialectic between experience and dialogue, which is the development, characterized by overcoming of contradictory, the fight between the old and new, the emergence of a new quality.

Using of dialogue' method (with *self* or with *others*) is able to help student to construct the meaning and understanding of many possible experiences. A teacher who can creatively use dialectics of the learning activities and which students move back and forth between the intake of rich new experience and attractive/pleasant, deeply meaningful dialogue can increase probability that students will gain valuable and meaningful learning experience.

The above-described L. Dee Fink (2003) active learning idea coincides with P. Freire (1996) recognition that learning is interpersonal relations in the form of dialogue where teacher and students fuse in the joint identification and re-discovery of the study object. Instead of knowledge statically sold as a certain teacher's estate, dialogue requires a dynamic convergence of the object. Therefore it

can be agree with the statement that teaching and learning in general is better, both ethically and practically, if teachers and students collaborate in researching and interviews with both one another, but also study objects.

Has always been actual question why classroom dialogue should be used? R. Satklifs (Menon project, 2005) offers arguments in favour of dialogue in classroom, because he believes that most learning is dependent on new information or viewpoints that challenge and complicate every student' knowledge and understanding, because less appropriate is anything that tends to motor learning - and more suited to become discursive and dialogue approach. Development happens when ideas are being tested by experience. D. Dewey (1997) insists that students are given ample opportunity to carry out targeted research. Therefore, education should provide students knowledge on how to ask questions, not only to provide examples of how to solve problems or how to respond. Dialogue research in education has always been an actual. And nevertheless, authors' group of Menon project (2005) endorses the view supported by a growing number of teacher around the world who believe that greater attention be paid how students can best learn, not how teachers can best teach the meaning of to train and transfer knowledge. There are several reasons why would be supported such a refocusing because in conduct of research has been collected evidence that discussion of what student should learn, is quite an effective way to promote learning; inquiring whether a research-based approach to teaching and learning processes increases the level of motivation and learning in different subjects; students can improve their questioning and reasoning skills, practice them regularly, especially if it include in the philosophical elements of the questioning; teachers need to improve their skills of asking and good judgment, if they wish to promote students' learning. For that reason, in a world where knowledge is rapidly distributed and where skills are constantly changing, young people must learn and know the subject, and to think quality. The final aspect is becoming increasingly important because more and more young people are using the internet as a source of knowledge, but they lack skills of critical researching that will enable skillfully to evaluate information and effectively to process it.

Dialogue provides the results of education, if each participant has the investigative skills. M. Lipman (2003) considers that a person can become educated only if he surviving and experiencing a new cognitive process to find the answers. A good teacher recognizes that a student is unable to perceive statement as a matter of course, but the student arrive at the assertion of truth is required meaningful knowledge. According to M. Buber (2002), in fact most successfully teacher teaches when he deliberately does not seek to teach, but acting spontaneously based on their experience. Then he can get a student's confidence because he has been able to persuade him. And when the student has gained confidence, he accepted teacher as people who can be trusted and that teacher adopted student, without showing desire to influence him; and so the student learns to ask. In this context, encounter with *Thou* and convergence of horizons is possible if we have the principle desire to understand other. In dialogue situation it is possible only if we listen and restrict ourselves. Whereas the dialogue is both individual and public activity, listening is composed of two strands - listening to others and listening to inwardly. Therefore, in the dialogue silence is equally important as speaking because thinking and understanding in silence create new meanings. The format of the dialogue is appreciatory, confrontational (presenting contradictions in expressions and/or behaviour, question the realistic nature of thoughts), exploratory, aimed at learning to reflect, activating and network-inducing.

Dialogue' method of vocational education will be successful if it is based on constructive cooperation, which will involve students, teachers, school management, career counsellor and employers. At present in Latvia is observed fragmented cooperation among vocational education establishments, guidance counsellors, local employers and the community, which led to having a successful dialogue of students' career development, which involving their needs, acquired qualifications and interests, as well as local, regional, national and European social and economic dynamics. These days, a job is also considered to be an opportunity to give meaning to one's life. From this perspective, it is important for individuals to be able to justify their actions as personal choices and, with this in mind, to search for personal beliefs and ideas (McCash, 2006). Modern career counselling is about connecting identity with work. For this reason, important is student self-reflection, what indicate direction to *what* and *how* students are learning; *what* students are doing and *how* they got there; but question *why* is crucial for finding out reasons and motives.

# **Results and discussion**

Dialogue as one of effective tools is used when the vocational secondary schools' students lacking motivation to learn because it is factor that influences the career development. In this context may agree to the Netherlands scientists A. Winters, F. Meijers, M. Kuijpers, H. Baert (2009) view that a career forming environment in vocational secondary schools justified by the circumstances which is based on practice and where the education environment is an informative, searching and open to dialogue.

Studying abroad experience of practice of the career dialogue' methods in the vocational secondary schools, the author of this article concludes that both of the above described forms of dialogue *(dialogue with self* and *dialogue with others)* are widely used. And experience of the North countries - Netherlands, Denmark, Sweden and Finland - shows that vocational secondary schools are not only as an establishments that focuses on getting learners qualified, but also as a *career centre* where students acquire competences such as being able to reflect on personal ambitions and motives, and taking action and initiative to direct their own career development (OECD, 2008).

Recognized an experience of *Stoas* College (the Netherland), where student's career development based on dialogical learning environment reveals the *dialogue with self* looking for answers to the following questions (Noom, 2010):

- 1) What is my passion and what are my challenges?
- 2) Which competencies do I want to improve?
- 3) Where can I learn of new experience?
- 4) How do I rank priorities?
- 5) Which Tasks and roles do I want to develop?
- 6) What kind of proofs and d instruments can I collect to show my development?
- 7) How can I work on development of competencies in an authentic situation?
- 8) What does my action mean to me and my surrounding?
- 9) Did I develop the competencies?
- 10) What does this development mean for me?

It is a learning spiral where Keywords are to *like, to be able to, to do* in which result students occur a self professional growing up through systematic thinking and developing eco-intelligence. To realize this, many vocational secondary schools are implementing career guidance as an integral part of competence-based education and are using or implementing instruments such as *portfolios* and *personal developments plans* to help students develop career competences (Kuijpers, et al. 2006). This example indicate that e acquiring of students' professional skills and competences is going in dialogue-based environment, resulting in which students obtains an authentic learning experience and occupational practice; they are able to influence content and progress of the curriculum and where career learning process is being evaluated and discussed in a dialogue between students and teachers (Lombardi M. M., 2007).

To the *Dialogue with Other* we can look from the three angles: *teacher – student; teacher - student - supervisor or mentor of practice* and vocational secondary school – *social partners*. In Dutch, vocational education it's means learning in practice of labour organizations (Mittendorff et al., 2008). During these placements, students receive guidance from a mentor from school (usually a teacher) as well as from a mentor from practice. Teacher, mentor and the student have at least two meetings to discuss the work experiences of the student: one at the beginning of the placement and one at the end. It training conversations are almost completely aimed at evaluation and on transferring expert opinions from the teacher and mentor to students. In such a dialogue-based environment student learns to develop three different career competencies: career reflection (reflection on qualities and motives), career self-management (work exploration and career control) and networking. But how to recognize research group pedagogies of professional development at The Hague university (Kuijpers, Meijers, 2006), this type of dialogue is currently being held very rarely, and least of all in a proactive manner. When a student does speak with his mentor from school and/or practice, the conversation is mainly held *about* and *to* the student and hardly *with* the student as a result, career counselling include

a monologue which provide an advice, feedback, and information. The dialogue is about talking *with* the learner and not just *to* or *about* the learner. Some of the conditions for having a career dialogue are that counsellor must show concern about the well-being of the learner and that he must show genuine interest in the issues that truly matter to the learner. Furthermore, it is important for the learner to trust that he or she is taken seriously by the counsellor, that counsellor treats what is being said as confidential and that the counsellor is fully equipped to support the learner in his or her (learning) career.

The author of this article, based on their indirect observations and studies (2006; 2011) on the way of students career development (studying further and the labor market) concludes that all vocational secondary schools' teachers motivate their students (on a regular basis - 25%; sometimes - 75% from 36) and begin to do from the first year (66%). In turn, interviewing 40 different vocational secondary schools' graduates who are now studying at LLU concludes that only 23% of respondents as the main motivator named teachers of practical training, 15%, parents, 8% - LLU students who are graduates of vocational secondary schools, 8% - course tutors and 5% - of all teachers. It can be concluded that vocational education teachers are still a few thinking about the future of their students and does not encourage them to make long-term goals. At the same time, a fact that students were motivated to their career development after graduation aware of only 41%, 17% - reject, 27% - uncertain, 15% believe that it may have been motivated. Should be added that students' motivation for career development shall be carried out mainly by teachers who lack the professional skills and competencies for career counseling.

*Dialogue* between *vocational secondary school and social partners* is one of the providers for the students' career development support. Foreign experience shows that social partners have advisory and decision-making role by different aspects of vocational secondary schools (see Table 1), cannot be allocated to the situation in the Latvia vocational education system.

Table 1

North Countries of EU	Curricula D / A	Practical training content D / A	Duration of practical training D / A	Acquired competences D / A	Examination requirements D / A	Delivered qualificat ions D / A
Denmark	95 / 95	100 / 95	100 / 95	95 / 100	95 / 100	95 / 100
Finland	53 / 53	0/53	0 / 0	53 / 53	53 / 100	47 / 0
Norway	0 / 100	1001 / 0	0 / 100	0 / 100	0 / 100	100 / 0
Sweden	0 / 98	0/98	0 / 98	0 / 98	0 / 98	0 / 98

Involvement of social partners in vocational secondary schools (%) (OECD 2008)

*Note*: **D** – decision making; **A** – advisory role.

Can be regarded at the moment, this dialogue is fragmentary and inconsequent. Therefore (MES concept, 2008) remains a serious and rather controversial issue: a large part of employers want their future employees to be young and with work experience what the vocational secondary schools cannot provide because work experience is completely the responsibility of employers. Only 50% of employers willing to take students to practice, if could be adequate state tax policy. Employers by employing young professionals are faced with the noncompliance of ethical standards, lack of communication skills, willingness to work in good faith. Employers are still not satisfied with the distribution of theory and practice. Only half of employers are ready to participate with their proposals for curriculum development. This indicates that too few employers are involved in vocational education-related issues. Employers are not willing to invest their funds in long-term development, which is education. Insufficient dialogue between vocational secondary school and social partners is the cause that content of the curriculum is seen as incompatible with labor market. In addition experts of Vocational education (MES concept, 2008) have recognized the problems with both the practice places and further employment of graduates which are frequently not related to the failure of education quality, but to a large extent they are incurred as a result of the economic situation. However the school has need to become more open to business environment and the business community are involved in education programs, then focus on vocational training for young people will be more attractive and valuable. At first students have see that in the country or the world generally are working there undertakings that require their skills. They need assurance that such work is necessary. Enterprises should be supported vocational education system of Latvia with the involvement in evaluation of the qualification examination, offering places of practice, technological provision in schools; to think about opportunities for continuing education of teachers, thereby growing up a greater awareness of the need for dialogue in career development of vocational secondary schools' students.

# Conclusions

- Dialogue is a common human thinking and reflection mode, in which its participants using each their distinct way of thinking, perception and experience increase trust and achieve mutual understanding before engaging in decision making; deal with emotion-laden, potentially divisive content, determine shared interests and establish common ground of topic or issue; manage diverse opinions, create new ways of seeing and doing things, as well as develop cohesiveness and community.
- Dialogue on development of vocational secondary schools' student career have succeeded if
  - a) it occurs in some ways: a dialogue *with self* finding out self as a person, knowing strengths and weaknesses, identifying self needs and opportunities; dialogue *with others* (peers, teachers, supervisor or mentor of practice and potential employees);
  - b) have a dialogue-based environment that is an informative and searching; has a studentcentred approach, which is based on competencies; where students are made responsible for own learning and career path; where teachers are seen as coaches who guide students along their career way; where are used *portfolios* and *personal developments plans* as a instruments of dialogue.
- Abroad experience shows that use of the dialogue method in inclusion of social partners in the educational process of vocational secondary schools refers to the mutual interest to make a balance between curriculum and demands of labor market.

# References

- 1. Arnett R. C. (1986). *Communication and community: Implications of Martin Buber's dialogue*. Publisher: Southern Illinois University Press, p. 132-137.
- Buber M. (2000). *I and thou* (2nd ed.; R. G. Smith, Trans.). New York: Scribner/Macmillan. p. 28-32.
- 3. Buber M. (2002). *Between Man and Man*. Publisher: Rutledge. 288 p.
- 4. Burbules N. C. (1993). *Dialogue in Teaching: Theory and Practice (Advances in Contemporary Educational Thought Series)*. Publisher: Teachers College Pr, p.112-126.
- 5. Dewey J. (1916). *Democracy and Education*. HTML marks up copyright 1994 ILT Digital Classics. [online] [06.10.2011]. Available at http://www.ilt.columbia.edu/publications/Projects/digitexts/dewey/d\_e/chapter07.html#backf1
- 6. Dewey J. (1997). *Experience and Education*. Publisher: Free Press, p. 17-34.
- 7. Doing philosophy in the classroom. A handbook for teachers (2005). *MENON: Developing Dialogue through Philosophical Inquiry Comenius 2.1 Action 226597-CP-1-2005-1-MT-COMENIUS-C21; p.12-45.*
- 8. Fink L. D. (2003). Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses. Publisher: Jossey-Bass, p. 155-195.
- 9. Freire P. (1996). *Pedagogy of the Oppressed*. <u>Penguin Books Ltd</u>; 176 p.
- Karjeras izglītība profesionālās vidējās izglītības iestādēs. Skolotāja rokasgrāmata (2006). (Career education in vocational secondary education establishments. Teacher's Guide). VIAA, 5.-8.lpp. (In Latvian)
- 11. Kuczera M., Field S., Hoffman N., Wolter S. (2008). *Learning for job: OECD reviews of Vocational education and training.* Sweden © OECD, p. 12-16.
- 12. Kuijpers M. *Career dialogue: About learning to talk (and) about learning to choose.* p. 175-189. [online] [06.10.2011]. Available at

http://www.cinop.nl/projecten/euroguidance/docs/Career%20Learning/11%20career%20dialogue.pdf

- 13. Kuijpers *M.*, Meijers F. (2009). *Career learning Research and practice in education*. Euroguidance the Netherlands, p. 119-146. [online] [27.10.2011]. Available at <u>www.euroguidance.nl</u>
- 14. Lipman, M. (2003). *Thinking in Education*. Cambridge University Press, Cambridge, p. 49-53.
- Lombardi M. M. (2007). Authentic Learning for the 21st Century: An Overview. Edited by Oblinger D. G. © EDUCAUSE, pp. 2-4; 7-10 [online] [12.10.2011]. Available at <u>http://net.educause.edu/ir/library/pdf/ELI3009.pdf</u>
- 16. McCash P. (2006). We're all career researchers now: breaking open career education and DOTS. *British Journal of Guidance & Counselling, Vol. 34* (4), p. 429-449.
- Mittendorff K., Jochems W., Meijers F., Brok P. den (2008). Differences and similarities in the use of the portfolio and personal development plan for career guidance in various vocational schools in The Netherlands. *Journal of Vocational Education and Training*, 60 (1), p. 75-91.
- Noom J. (2010). Service concept for coaching of proffessional development in studies and career. Proceedings of International Conference *"Teacher Training for Vocational Education in Contempiorary Europe"* on the occasion of 80th Anniversary of the organized teacher training for agricultural and forestry schools. Study and Information Centre CULS Prague 9 – 10 September 2010. p.129 -139.
- 19. Profesionālās izglītības pievilcības paaugstināšana un sociālo partneru līdzdalība profesionālās izglītības kvalitātes nodrošināšanā. IZM koncepcija (Enhancing attractiveness of vocational education and forming a partnership with social partners to ensure the quality of vocational education. MES conception). Rīga, 2008, 41 lpp. (In Latvian).
- Soika I., Kirse A. (2006). Motivation of vocational secondary schools graduates for competition in the labour market. Proceedings of the 3th International Conference "*Rural envirounment. Education. Personality.*" Jelgava, LLU (IEHE), Journal of Science Education, Vol. 7, 2006, special issue p. 36-39.
- 21. Winters A., Meijers F., Kuijpers M., Baert H. (2009). *What are Vocational Training Conversations about?* Journal of Vocational Education and Training, 61 (3), p. 247-266.

# PEER COUNSELLING IN STUDY ENVIRONMENT

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**Abstract:** The increasing speed of life forces students to face various problems in their formal and informal learning environment more often. Inability to deal with them independently leads, at best, to the learning quality decrease, and at worst – to the learning dropout. Assessing the experience of EU Member States in this issue reveals that one of the options to solve this problem is introduction of peer counselling at the university. This option would help to reveal the maximum of the student's educational potential and to reduce student's dropout during the study period. The purpose of this article is to evaluate the situation at Latvia University of Agriculture (LUA) level, to learn the opinion of students in a given issue and to justify the necessity of peer counselling introduction at the LUA study environment.

Keywords: peer counselling, student dropout, tutors, study environment, career counselling.

## Introduction

Career guidance in Latvian institutions of higher education has grown very rapidly in recent years. There is a new generation of career centres, and there are young and well educated reinforcements, which are involved in career supporting. Career guidance includes three areas of Figure 1 - career education, career counselling and career services (Osipow, Fitzgerald, 1996).

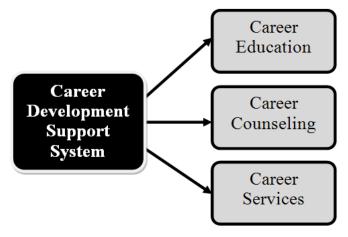


Figure 1. Three interrelated areas of guidance system

A very important step for the new student entering the university, is beginning of the studies - start-up phase, when there is a need for adapting to new knowledge acquiring conditions - the independent studies, as well as the new study life - daily life in hostels, the new (already adult status) relationships, and all possible leisure activities - sports, art, and frequently - of paid work at the spare time.

Student counselling is very important in the freshmen support, especially when advice is given by peer or tutor - senior student in the same university. This type of counselling in Europe and America is called as peer counselling. "Peers are individuals who share related values, experiences and lifestyles and who are approximately the same age. Peer support is defined as a variety of interpersonal helping behaviours assumed by non-professionals who undertake a helping role with others. It includes one-to-one helping relationships, group leadership, discussion leadership, advisement, tutoring, and all activities of an interpersonal helping or assisting nature." (Kracen etc., 2003)

Specifics in the peer counselling is, that the counselling is done not by a formally superior consultant, but by a smart mentor who is positioning him/herself as the client's partner, mate and well-wisher. This approach helps consultee to reveal himself psychologically; it reduces the stress factors

that inevitably arise in formal consultation. In addition, if a peer counsellor comes directly from the same environment as the consultee (he is a co-student, colleague, etc.), there can be observed a deeper understanding of the situation. On the situational environment-sharing basis between the consultant and consultee there appears to be a strong emotional link as well.

Patricia Sisco, a specialist in working with people with special needs, writes: "Peer counselling has many advantages to the client, the counsellor and the community. The client is given the opportunity to model after someone whom s/he has reached out to. S/he is given the opportunity to develop coping skills that presumably work because they work with the peer counsellor s/he is relating to." (Sisco, 1992) From this statement it appears that in case of peer counselling a direct exchange of experience between the consultant and consultee takes place, and the searches of problem solution are based on real consultant experience, rather than metaphorical situation modelling, as it happens in the case of the formal counselling. Peer counselling is very widely used and researched in Western European countries, as well as in America, where this method is widely used since the 70's. This method is based on humanistic psychology adherent researches and ideas, such as Everett Shostrom and Lawrence Brammer (Brammer, Shostrom, 1977.). On the basis of their collaboration a number of recommendations and the methodology for peer counselling were made. Student tutor service, which is widespread in the EU countries (Estonia, Finland, Ireland, etc.), is also using peer counselling methodology, the freshman are mentored by senior students who have completed the appropriate training and in their further work helps freshman getting used to university, study environment and living conditions.

There is more than 10 years experience of student consultant's education in LUA – choice program "Study Advisor" (6 ECTS), led by Institute of Education and Home Economics (IEHE) lecturer T. Sēja, was offered in 1998/99. In the fall of Year 2001, 42 students started their studies at the course "Learning Consultant" (9 ECTS). The issued study and career counselling system appeared in the whole country, and in Year 2002 the LUA IMI participated in the project, which was supported by the EU Leonardo da Vinci Program. In Year 2001/2002 theoretical course was attended by 68 students, and as it was reported by the program manager, the program was implemented just by 80%, because it was not followed in practice. But there was a possibility to attend the English career specialist lectures.

In 2002/2003 academic year 37 students, who received the appropriate certificate, continued their studies. In 2003/2004 academic year 25 veterinary students completed the course of «Study and career counselling". Since then student counsellor structure withered. In the autumn of Year 2011 Student Career Centre in Faculty of Engineering was launched, under which tutor education activities were resumed, in parallel with theoretical knowledge there were practical courses also carried out. In September of the Year 2011th career centre was visited by the Estonian University of Life Sciences lecturer, student counsellor supervisor. She conducted a workshop in "Tutor Training Week", which was attended by 12 LUA students, who received a certificate of the 1 ECTS.

# Materials and methods

Information that is reflected in this scientific article is rooted in theories that underlie modern career counselling and support (Osipow, Fitzgerald, 1996; Ertelts, Šulcs 2008; Sawickas, 1997; Фукуяма (Fukuyama), 1989), educational ecology (Bronfenbrenner, 1996), a holistic approach, as well the article assesses the student's age range with the typical psychological neoplasis (Ananyeva school in Russia – Вербицкий (Verbitsky), 1990; Попов (Ророv), 2004), as well the researches of young adult age characteristics of the Robert Havighurst (1971) and his followers - Arnet, Reifman etc.

Empirical experience was gained by examining the EU's university websites (especially Estonian universities); as well as observations that were made during a visit in the Estonia gives a reason for need to create a peer counselling service in LUA for student's awareness and support. In the Autumn of Year 2011th a questionnaire survey was made. In this survey 268 first year students participated; the received results were processed, analyzed and are reflected in this article.

# **Results and discussion**

Age period of student most often is viewed as an early stage in his youth, although today's studies may take place throughout whole life. Students age period have been closely investigated by one of the most famous Russian psychologists Boris Ananyev (Ананьев 1907-1972) and his followers A. Verbitsky and Y. Popov (Вербицкий, 1990, Попов, 2004) and others as well. Ananyev laid the foundation for science acmeology, whose main research area is related to professionalism as the highest stage of human development (Ананьев, 1974). An origin of any studying person professionalism is rooted in study years (Ананьев, 1974).

Student's age, according to Ananyev, is a sensitive period for development of important human sociogene potential. Higher education has a very significant impact on the human psyche, including perception, memory, thinking, attention, and the ability to manage a certain range of logical operations. Students' age as a stage of socio-psychological category, is characterized by rapid, sometimes stormy development of all the personality structure, including intellectual, and there is observed a formation of mental and psychological characteristics and the neoplasia in the psyche.

The commencement of studies at the university can be compared to what one of the famous American psychologists Urie Bronfebrenner has called as the "ecological transition" (Bronfenbrenner, 1996). Bronfenbrenner using a phenomenological explanation of existence stresses that the environment is characterized not only by the objective environmental features, but also by perceiving and apprehensive of each participating organism, and the meaning of the environment is attributed by the scope of human consciousness. Definition of micro-determinant that is proposed by Bronfenbrenner includes a term of direct experience (Bronfenbrenner, 1996). The term has been used to demonstrate that not only the objective elements of the environment have the scientific importance, but also important is the way they are perceived by the occupants of the environment. Considering these findings, in the works of other researchers appears the concept that peer counselling should be based on micro counselling (Ertelts, Šulcs, 2008).

Robert Havighurst (1900 - 1991), famous American psychologist and expert in the age period has acknowledged that the youth and early adult age range from 20 to 25 years is a time when fundamental life and career construction competences are developing. It is supplemented by his follower Jeffrey Jensen Arnett, who during the age-stage studies which he names "Emerging adulthood" particularly emphasizes the young or early adult age (Havighurst, 1971).

During the academic study years a rapid career advancement formation progresses; students in their age are prone to self-determination, they can actually identify and develop their future plans, realize their social motives in a connection with a citizen's obligations to carry out and make achievements in public benefit activities for which the country has made it possible to have an education (Bell 1996, Savickas 1996). To orient in this complicated package of measures, young people - students need a support - from the older, experienced generation, as well as from the peers. The need for support has been studied in the universities all over the world - Australia (Waters, 2004), Canada (Larose etc., 2009), also studies has been provided in Europe.

Peer counselling support for the students in Europe is developed and evaluated by a peer support association in Ireland, Trinity College Dublin. In neighbouring Estonia, Tallinn University student career centre professionals have received Peer counselling certificates of Supervisors. Based on the methodology developed by Trinity College (Peer Support Training Manual), Tallinn University has already trained more than 150 peer counsellors – tutors. Teaching courses for students at 2011/2012 school year have requested by the Arts, Music and the Defence Schools. Figures that is indicated in Table 1, shows the tutor quantity in the Estonian major universities at the 2011/2012 study year.

Students, who have completed this training and act as tutors, also receive a special scholarship.

Table 1

University*	Faculty or institute	College	Students total	Tutors total	Tutors at faculties/ college	Foreign tutors
UT	9	4	18 000	134	87/9	38
TTU	8	4	14 000	170	165/5	N.i.
TLU	19	5	12 000	56	53/2	N.i.
EMU	5	1	5 000	26	25/1	N.i.

Student and tutor count in four major Estonian universities

\* UT – Tartu University

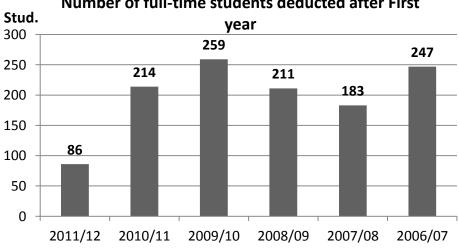
TTU - Tallinn University of Technology

TLU – Tallinn University

EMU – Estonian University of Life Sciences

In Russia peer counselling from recent times also is quite popular and studied. As one of the coordinators of this project, Tatiana Kovalyova admits, peer counsellors at the universities are very effective, they are believed, and they should be taken into account as an enormous resource of the new student support (Ковалева, 2000). Russia has undergone a number of conferences dedicated to the tutor support, in which origins, philosophical basis and the methodology of this type of counselling were overviewed (Рыбалкина, 1996).

The necessity of peer counselling introduction to LUA is partially revealed by the statistics of first-year full-time LUA students, who have dropped out within the first year. Considering this a conclusion can be made that the quantity of that kind of students is insufficient. As it is shown in Figure 2, within the period of the 2006th by 2010th year, number of expelled or dropped out students varies from 183 to 259 people. Monitoring the current 2011/2012 academic year, there can be seen that in the first half about 86 students have been expelled.



Number of full-time students deducted after First

#### Figure 2. Number of full-time students deducted after First year in LUA

To more precisely determine the reasons, why students drop out of studies, first semester of 2011/2012 academic year was examined. Results of this examination are available on Table 2, in which there are indicated official reasons of the student deduction in the various faculties.

Table 2 lists that the most common reason for deduction of students in all faculties is leaving by the own desire, and less frequent - study contractual obligation violation and not started studies. It is possible to assume, that during the studies freshman faced with situations and problems that reduced their personal motivation and forced to leave the studies. It can be expected that, if these students in time would have been turned to tutor, number of the expelled students would be significantly lower.

	Deduction reason/number of students								
Faculty*	Study contractual obligation violation	By the own desire	Not started studies	started of the study Rector		Not returning from academicals vacation	Total		
MF	4	13	4	0	0	0	21		
PTF	0	7	0	0	5	0	12		
LIF	0	0	6	4	1	1	12		
TF	1	7	0	0	3	0	11		
VMF	0	5	4	0	0	0	9		
EF	3	4	0	0	0	0	7		
SZF	0	4	0	0	3	0	7		
ITF	2	3	0	0	0	0	5		
LF	0	3	0	0	0	0	3		

#### First year full-time student's deduction reasons

\* MF - Faculty of Forestry

PTF - Faculty of Food Technology

LIF - Faculty of Rural Engineering

TF - Technical Faculty

VMF - Faculty of Veterinary Medicine

EF - Faculty of Economics

SZF - Faculty of Social Sciences

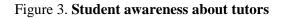
ITF - Faculty of Information Technologies

LF - Faculty of Agriculture

Since the Student Career Centre was launched in the autumn of 2011th in the Faculty of Engineering, First year student awareness and understanding of tutor activity was explored. Figure 3 shows the results of the survey of students in several faculties.

Do you understand the idea of concept of "TUTOR"?

#### Stud. 78 80 80 74 70 60 50 Yes 40 No 30 23 20 8 5 10 0 TF EF LIF Faculty

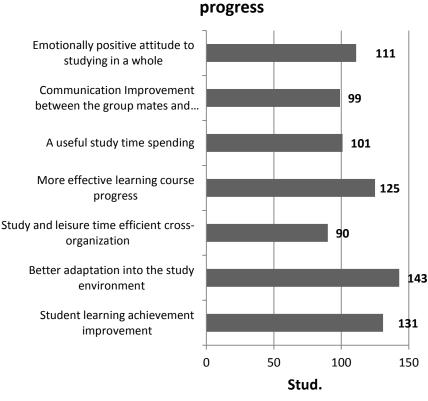


From the graph shown in Figure 3 it can be concluded that the students lack knowledge and information about tutors and their activities, as well as about the opportunities for students to apply to

Table 2

tutor for help. Thus, one of the main tasks of the newly formed tutor service in LUA is student informing, encouraging and support to use tutor services, and later – to become tutor itself.

After first informational education activities that were performed for LUA first year students in the autumn of 2011th, the students were prompted to answer the question, what they think are most important tutor service usage impact on student learning progress. Responding to this question, summary of which is shown in the Figure 4, the freshman revealed the most common problems they face during their studies, as well as the weak points in the learning process, where they would like to receive tutor support and assistance.



### Tutor service usage impact on student learning

Figure 4. Tutor service usage impact on student learning progress

Analyzing the results of a survey, it can be concluded that the most actual problems to the students are caused by getting into study environment, and as well concerns about learning success. First year students consider that tutor services can best promote adaptation into study environment (143 of 268 responses), this statement is closely followed by the opinion that tutor assistance and support could lead to improved students achievements (131 response from the 268) and more efficient learning course progress (125 of 268). It is very important that the tutor should be the same program student as the consultee. The meaning is that the tutor must be competent enough to help the freshman get into the new study environment, and as well on the basis of personal experience and reflection, he could be giving advices about training issues. In addition, students would like to see an intelligent friend in tutor who could support them emotionally in tough times, and could provide the necessary impetus in the most difficult moment. Students were prompted to answer the direct question of using tutor services if necessary. Distribution of answers is illustrated in Figure 5.

On the basis of students' answers it can be concluded that a lot of students do not know if they would use the tutor services or not. Such a distribution of answers there is caused by a lack of information, as well as because tutor services are not so popular in the Latvian educational institutions. However, the positive trend is that only 10% of the respondents have argued that they will not use the tutor services. It can be concluded that tutor service at the LUA Student Career Centre is necessary, functional and useful innovation.

Emphasizing the benefits of the peer counselling and support for freshmen should not be forgotten fact that the same consultants during the peer counselling are gaining an invaluable and unique experience, which will help them during their future career.

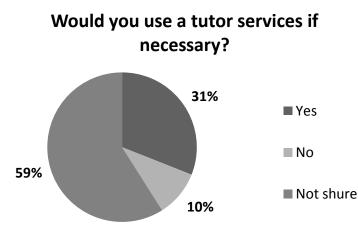


Figure 5. **Tutor service usage** 

#### Conclusions

Student career support in LUA is using an ecological approach - within the scientific direction of LUA Institute of Education and Household Management it is ecology of human development, which is holistic, humane and transdisciplinary.

From the perspective of the new educational paradigm, student consultant (tutor) working in his professional area provides essential services, which is consistent with almost every point of the new educational paradigm, particularly stressing the fact that work is a matter of honour, and the new consultant is developing spiritually and improves his competences, realizing the principle of "learning by teaching."

Counselling is a socio-humanitarian operation, which provides direct interpersonal interaction, and the result of consultation directly depends from the quality of this interaction. It follows the fact that the consultant must have a specific set of personality characteristics that might develop and contribute to these interactions. The main difference of peer counselling from other conventional counselling methods is that it requires more empathy from the counsellor, and is not so demanding to his speaker abilities, so this method is the most effective at student counselling, or tutoring.

Freshman, engaging in LUA learning environment faces with multiple problems that with leads to withdrawal from university with the early lack of support. The student's counsellor or tutor's main purpose is to provide this support to facilitate first year student learning motivation and emotional well-being.

Peer counsellor educating at LUA would give lots of benefits to all involved parts. From one hand, first year students would have informational and emotional support, from other - tutors would acquire important skills and experiences. Even the university would gain loyal, trustworthy, patriotic and socially competent students and graduates as well. High quality of the educational process in the university which is giving the student a strong professional competences, will affect the young person and future professional maturity to manage with a non-standard, non-routine work and communicational situations, as well to feel free and comfortable in everyday life.

#### References

- 1. Bell E. (1996). *Counselling in Further and Higher Education*. Open University Press, Buckingham, 172 p.
- 2. Brammer L. M., Shostrom E. L. (1977). *Therapeutic psychology: fundamentals of counselling and psychotherapy*. Prentice-Hall, New Jersey, 410 p.
- 3. Bronfenbrenner U. (1996). *The Ecology of Human Development*. Harvard University Press, USA, 330 p.

- 4. Ertelts B. J., Šulcs V. (2008). *Karjeras konsultēšanas kompetences* (The competences of career counselling). Valsts izglītības attīstības aģentūra, Rīga, 143 lpp. (In Latvian)
- 5. Havighurst R. J. (1971). Developmental Tasks and Education, 3th ed., Longman, New York
- 6. Kracen, A., Naughton, A., O'Reilly, J., Panoutsakopoulou, V., & Rooney, N. (2003). Peer Support Training Manual. Dublin: Counselling Service, Trinity College.
- Krumboltz J.D., Nichols C. W. (1990). Integrating the Social Learning Theory of Career Decision Making in Walsh, W.B. & Osipow, S.H. (eds) Career Counselling: Contemporary Topics in Vocational Psychology, Lawrence Erlbaum Associates Inc., New Jersey, pp 159-192.
- 8. Larose S., Cyrenne D., Garceau O., Harvey M., Guay F., Deschênes C. (2009). Personal and social support factors involved in students' decision to participate in formal academic mentoring, *Journal of Vocational Behaviour*, Vol. 74, pp 108-116.
- 9. McGuire-Bouwman, K. *Psychotherapy Training Through Peer Counselling* [online] [25.11.2011]. Available at
  - http://www.cefocusing.com/pdf/2F2dPsychotherapyTrainingThroughPeerCounseling2.pdf
- 10. Osipow, S.K., Fitzgerald, L.F. (1996). *Theories of career development 4th ed.*, Allyn & Bacon, Boston, pp 205-206.
- 11. Kracen A. (2003). *Peer Support Training Manual*. Student Counselling Service Trinity College, Dublin, 126 p.
- 12. Savickas M. L., Walsh B. W. (1996). *Handbook of Career Counselling Theory and Practice*. Davies- Black, Palo Alto, California, 322p.
- 13. Savickas M.L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *Career Development Quarterly*, Vol. 45, pp 247-259.
- 14. Sisco, P. *Peer counselling: an overview*. [online] [25.11.2011]. Available at http://www.independentliving.org/toolsforpower/tools22.html
- 15. Waters, L. (2004). Protégé-mentor agreement about the provision of psychosocial support: The mentoring relationship, personality, and workload. *Journal of Vocational Behaviour*, Vol. 65, pp 519-532.
- 16. Ананьев Б.Г. (1974). *К психофизиологии студенческого возраста.* // Современные психологические проблемы высшей школы (To the psychophysiology of college-age. // Modern psychological problems of higher education). Vol. 2, pp 32-34. (In Russian)
- 17. Вербицкий А.А. (1990). Перестройка вуза как звена педагогической системы и сферы социальной практики (The restructuring of the university as an educational system and a social practice sphere). Современная высшая школа, Vol. 2, pp 17-21. (In Russian)
- 18. Ковалева Т.М. (2002). Тьюторское сопровождение как управленческая технология. *Технологии открытого образования* (Tutor support as a management technique. Technologies of Open Education). АПКиПРО, Москва. (In Russian)
- 19. Попов Ю. (2004). Возродим в МИФИ научно- техническое творчество молодежи( Scientific and technical creativity of youth reviving in MIFI). Инженер- физик, Vol.12, p 6, 8. (In Russian)
- Рыбалкина Н. В. (1996). Идея тьюторства идея педагогического поиска // Тьюторство: идея и идеология. Материалы 1-ой Межрегиональной тьюторской конференции (Tutoring idea - the idea of teaching research / / Tutoring: The idea and ideology. Proceedings of the First Interregional Conference of Tutoring.). Томск, pp 15-30. (In Russian)
- 21. Фукуяма С. (1989). Теоретические основы профессиональной ориентации. (The theoretical basis of professional orientation). Москва: Московский университет, 322 p. (In Russian)

# Psychology

#### FACTORS OF EPISTEMIC AUTHORITY OF ASSOCIATE PROFESSORS

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**Abstract:** In a wide discourse of scientific and cultural processes, including social psychology, researchers more frequently address issues related to transmission and sharing of knowledge, the issues of epistemology related thereto, i.e. to the cognitive process, knowledge. Since the efficiency of the result of education, the process of studies is determined by the attitude towards the providers of information (knowledge, skills), this makes the issues of epistemic authority more topical. Aim of the Study – to study the determinative factors of epistemic authority of associate professors in institutions of higher education. Therefore, the article contains an analysis of the concept of epistemic authority in the context of education (Raviv, Bar-Tal, Raviv, Abin, 1993; Kruglanski, et. al, 2005; Ordonez, Ponsoda, Abad, Romero, 2009, Glenn, LeBaron, 2011). Explanations are provided for the results of the empirical study conducted in year 2011, obtained using the Epistemic Authority Research Methodology (Raviv, Bar-Tal, Raviv, Abin, 1993) adapted by the author and showing the determinative factors of epistemic authority of associate professors in institutions of higher education as perceived by students (N=307) and graduates (N= 248). The article contains a summary of key conclusions which show that epistemic authority of associate professors in institutions of higher education consist of knowledge, emotional, and behavioural factors.

**Keywords:** epistemic authority, epistemic beliefs, perceived authority, students, professors.

#### Introduction

Topicality of research in epistemic authority of associate professors lies in the questions of knowledge transmission and exchange which determine the efficiency of the process of studies. Understanding of epistemic (i.e., knowledge-related) beliefs of students is essential in administration of the study process (Ordonez, Ponsoda, Abad, Romero, 2009). The concept of epistemic authority explains subjective beliefs of students regarding the associate professor as a source of information. As a source of information, an individual may become an epistemic authority only to the extent he/she is believed by others to have properties which make him/her such an authority (Raviv, Bar-Tal, Raviv, Abin, 1993; Raviv, Bar-Tal, Biran, Sela, 2003; Kruglanski, et. al., 2005; Qiuamzade, Mugny, Chatard, 2009; Buehl, Alexander, 2005). Therefore, the Aim of the Study is to study student-perceived factors which determine epistemic authority of associate professors in institutions of higher education.

In a wide discourse of scientific and cultural processes, including social psychology, the conducted research reveals the social nature of authority of the associate professor of an institution of higher education – it develops through social interaction ((Raviv, Bar-Tal, Raviv, Abin, 1993; Blass, Schmitt, 2001; Kruglanski, et. al., 2005; Кондратьев, 1988; Петровский, 1984; Воробьев, 1997), in the context of social power (**Brauer**, **Bourhis**, 2006; Baldwin, Kiviniemi, Snyder, 2009). To define authority as a concept in social psychology, it is necessary to identify what conditions determine its existence or absence, what facilitates or prevents from having the position of an authority (Кондратьев, 1988).

The factors which determine perceived authority are analysed from various aspects. In research of epistemic authority, essential are studies regarding interrelations between leadership and trust, reliance which have been conducted in the context of organisational psychology already since the 60-ies of the 20th century (Dirks, Ferrin, 2002). The researchers identified the affective aspect of reliance, the cognitive aspect, and the total aspect and concluded that, in case a leader is an authority, then there is a higher degree of trust and reliance (Dirks, Ferrin, 2002). A similar opinion has been expressed by A. Petrovskis: all personal interaction plans include emotional, cognitively informative and behavioural components (Петровский, 1984).

Conclusions have been drawn in studies that epistemic authority can be chosen based on closeness, help, similarity, admiration, and values. Consequently, an individual chooses a leader as an epistemic authority due to the leader's wide-spread congruous message or accepts the message if it is

given by a leader it respects (Raviv, Bar-Tal, Raviv, Abin, 1993). In the context of cognitive conclusion, an individual may attribute a higher degree of epistemic authority to individuals with a similar opinion (Raviv, Bar-Tal, Biran, Sela, 2003). Consequently, a significant role in the content of authority of an associate professor is played by dimension "source of knowledge or perceived truth" (Pace, Hemming, 2004; Heritage, Raymond, 2005; Kruglanski, Raviv, Bar-Tal, Raviv, et. al., 2005; Qiuamzade, Mugny, Chatard, 2009).

Knowledge is relative, contextual, and socially constructed (Patchen, Crawford, 2011). Consequently, the perceived epistemic authority is dynamic, and it may change through interaction over time. Therefore, mere presence of respective information might not be sufficient to create influence of an epistemic authority (Lucey, Hill-Clarke, 2008). The student-perceived personal traits of associate professors are of importance (Lynn, 2011).

Student-perceived impartiality of the associate professor may be related to the authority's procedural fairness which determines the student-perceived fairness of professors (Schmidt, Houston, Bettencourt, Boughton, 2003) and facilitates transfer in acknowledgement and acceptance of the authority (Iyer, Muncy, 2008; Bar-Tal, 1991; Raviv, et. al., 1993; Jillapali, Wilcox, 2010). Diverse factors determining epistemic authority of associate professors have been researched, but so far epistemic authority of associate professors has not been researched in Latvia, and this proves that the study presented in the article is topical.

#### Materials and Methods

In year 2011, the author has conducted a study in Latvia on student-perceived epistemic authority of associate professors in various institutions of higher education in Latvia. In view of its aim, this article presents part of the obtained material. Epistemic authority research methodology approbated by the author was used in the study:

1. Epistemic Authority Scale (Raviv, Bar-Tal, Raviv, Abin, 1993). This survey was used to study the degree of student- and graduate-perceived epistemic authority of one associate professor chosen by them and the degree of four authority components: 1) associate professor's knowledge; 2) trusting the knowledge of the associate professor; 3) student's readiness to change his/her opinion under influence of the associate professor; 4) student's readiness to change his/her behaviour under influence of the associate professor as a source of information;

2. Reliance Question (Raviv, Bar-Tal, Raviv, Abin, 1993). This survey was used to study the reasons for the reliance of the students and graduates on the epistemic authority of the same one associate professor. 12 reasons (i.e., factors) explaining reliance are identified in the conception of epistemic authority: 1) expertness, 2) objectivity, 3) understanding, 4) subjectivity sympathy, 5) personal acquaintance, 6) similar thinking, 7) intuition, 8) transfer, 9) association, 10) friendship, 11) opinion, 12) characteristics. These reasons were used to formulate the questions of the survey (Raviv, Bar – Tal, Raviv, Abin, 1993). It was evaluate to what extent these reasons *correspond to the* particular associate professor;

3. Reasoning Questionnaire (Raviv, Bar-Tal, Raviv, Abin, 1993). This questionnaire was used to determine the degree of influence of the reason, based on which of the reasons is or is not acknowledged as a reason for reliance on the associate professor as an essential source of information.

The survey approbated by the author was published on website. 152 students participated in the survey: social sector - 51, arts sector - 50, sciences sector - 51 students; and 210 graduates: social sector - 58, arts sector - 86, sciences sector - 66 students; of which: 62.5% female students, 37.5 male students; 60.5 female graduates, 39.5 male graduates. The "convenient selection" method was used to form the study sample. The sample of graduates was formed to study student-perceived epistemic authority in extended-time interaction, based on: 1) the personality's systemic procedural model approach which researches how the content of one personality translates into another not only in the actual interaction, but also in extended-time interaction. (Петровский, 1984, Воробьев, 1997); 2) conclusion drawn from analyses of the studies: live presence of the associate professor (i.e., actual interaction) may strengthen the perceived authority, positioned as affected by the social context (Tremayne, Chen, Figur, Huang, 2008).

The factor analysis primary correlation matrix consisted of the following variables: 4 components of epistemic authority; reliance questions (i.e., 12 reasons for reliance) and 12 substantiations for reliance. The factor analysis was performed using the Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

#### **Results and discussion**

In both samples (students and graduates), the analysis of the factor matrix allowed to identify 3 newly-established factor models (Table 1, 2, 3). Factor models included only factors with value >0,4, because such value sufficiently explains the variation of the initial variables.

Table 1

Initial variables (student sample N=152)	Factor value	Initial variables (graduate sample N=210)	Factor value
The associate professor is an expert: well-educated or experienced (reason for reliance)	0,60	The associate professor was an expert: well-educated or experienced	0,67
The associate professor is objective (impartial) in his/her evaluations (reason for reliance)	0,56	The associate professor was objective (impartial) in his/her evaluations (reason for reliance)	0,71
Level of knowledge (component of epistemic authority)	0,80	Level of knowledge (component of epistemic authority)	0,79
Trust in knowledge (component of epistemic authority)	0,77	Trust in knowledge (component of epistemic authority)	0,78
Readiness to change opinion (component of epistemic authority)	0,43	Readiness to change opinion (component of epistemic authority)	0,46

#### Factor model – the cognitively emotional aspect of the associate professor's epistemic authority

Therefore, for students to perceive the associate professor as an essential source of information, trust in the information provided by the associate professor and be ready to change opinion, it is important that students acknowledge the associate professor's competence as reasons for reliance: ability to be an expert in his/her field and ability to be objective (impartial). In such context, objectivity is more important for graduates, and this proves that it becomes a more important factor of associate professor's epistemic authority during interaction over an extended period of time.

Table 2

Initial variables (student sample N=152)	Factor value	Initial variables (graduate sample N=210)	Factor value
The associate professor influences the	0,79	The associate professor influenced	0,66
student's views, action because he/she	- ,	the student's views, action because	
has influenced someone the student		he/she had influenced someone the	
trusts (reason for reliance)		student trusted (reason for reliance)	
The associate professor reminds the	0,76	The associate professor reminded the	0,68
student someone the student trusts		student someone the student trusted	
(reason for reliance)		(reason for reliance)	
The people the student trusts trust the	0,72	The people the student trusted trusted	0,63
associate professor (reason for reliance)		the associate professor (reason for	
		reliance)	
The associate professor influences or	0,72	The associate professor influenced or	0,79
does not influence the student's views,		did not influence the student's views,	
action because he/she has influenced		action because he/she had influenced	
someone the student trusts (reason for		someone the student trusted (reason	
reliance)		for reliance)	
The associate professor reminds or does	0,71	The associate professor reminded or	0,74
not remind the student someone the		did not remind the student someone	

#### Factor model - transfer

Initial variables (student sample N=152)	Factor value	Initial variables (graduate sample N=210)	Factor value
student trusts (reason for reliance)		the student trusted (reason for	
		reliance)	
The people the student trusts trust or do	0,72	The people the student trusted trusted	0,70
not trust the associate professor (reason		or did not trust the associate	
for reliance)		professor (reason for reliance)	

Transfer – transfer of attitude in perception of associate professor's epistemic authority shows the importance of the attitude of other reference persons towards the epistemic authority. An important reason for reliance is the associate professor's influence on a reference person the student trusts (transfer of influence) as well as association of the associate professor with a reference person, and that people the student relies on trust the associate professor (this is defined as a factor of friendship in acknowledgement of the reason for reliance (Raviv, et. al., 1993). These important reasons for reliance are closely linked with the substantiation for reliance – i.e., links between a decision about reliance on the associate professor as an essential source of information and decisions made in these contexts by reference persons.

Table 3

Initial variables	Facto	Initial variables	Factor
(student sample N=152)	r	(graduate sample N=210)	value
	value		
The associate professor has/had	0,54	The associate professor has/had	0,57
opinions I accept/accepted (reason for		opinions I accept/accepted (reason	
reliance)		for reliance)	
The associate professor has/had	0,57	The associate professor has/had	0,49
character features which are/were		character features which are/were	
important to me (reason for reliance)		important to me (reason for reliance)	
I and the associate professor are/were or	0,51	I and the associate professor are/were	0,47
are not/were not thinking similarly		or are not/were not thinking similarly	
(substantiation of reliance)		(substantiation of reliance)	
I feel/felt or do not feel/did not feel that	0,56	I feel/felt or do not feel/did not feel	0,60
I can trust the associate professor		that I can trust the associate professor	
(substantiation of reliance)		(substantiation of reliance)	
The associate professor has/had or does	0,52	The associate professor has/had or	0,68
not have/did not have opinions I		does not have/did not have opinions I	
accept/accepted (substantiation of		accept/accepted (substantiation of	
reliance)		reliance)	
The associate professor has/had or does	0,71	The associate professor has/had or	0,69
not have/did not have character features		does not have/did not have character	
which are/were important to me		features which are/were important to	
(substantiation of reliance)		me (substantiation of reliance)	

#### Factor model – similarities between the student and the associate professor

This factor model reveals the role of similar thinking and personal traits in perception of associate professor's epistemic authority. In the student sample, another identified item was factor model "objectivity of the associate professor", which included factors: the associate professor is or is not impartial (objective) in his/her evaluations – substantiation of reliance (r = 0.798); the associate professor is or is not an expert: well-educated or experienced (r = 0.781) – substantiation of reliance; the associate professor is or is not interested in student's well-being – substantiation of reliance (r = 0.485); the associate professor has or does not understand the student's needs – substantiation of reliance (r = 0.414); the associate professor has or does not have opinions the student accepts – substantiation of reliance (r = 0.442). Factor model "emotional aspect of epistemic authority" could be singled out in the graduate sample: the associate professor was interested in well-being of the student –

reason for reliance (r = 0.655); the associate professor understood the needs of the student – reason for reliance (r = 0.683); the associate professor was or was not interested in well–being of the student – substantiation of reliance (r = 0.721); the associate professor understood or did not understand the needs of the student – substantiation of reliance (r = 0.731).

In the newly-created cognitively emotional factor of epistemic authority of the associate professor, the high value of the factor of the associate professor's level of knowledge (r = 0.801) can be linked to a conclusion drawn in other studies that the epistemic authority is perceived more intensively if the provider of information demonstrates his/her knowledge more convincingly and more, and substantiates it (Glenn, LeBaron, 2011). However, it should be noted that acceptance of a authority and trust in his/her knowledge are related to the students' individual states of motivation (Ricco, Schuyten, Pierce, Medinilla, 2010); student's individual needs, interests and previous experience (Dewey, 1916, kā minēts Pace & Hemmings, 2004, 4); individual learning experience (Hallet, Chandler, Krettenauer, 2002; Ricco, Schuyten, Pierce, Medinilla, 2010). Researchers (Schommer-Aikins, 2004; Gottlieb, 2007; Hammer, Elby, 2002) emphasise that personal epistemology, which also includes perception of epistemic authority, is closely linked with the acquired versatile experience; individual variations have been observed in students' attitude towards the borders of authority of the associate professor (Yariv, 2009).

#### Conclusions

The content of epistemic authority of an associate professor in an institution of higher education includes three dimensions which may also define the factors of the associate professor's epistemic authority: first dimension (factor model): student- and graduate-perceived epistemic authority of the associate professor, which consists of three components (three factors): 1) knowledge of the associate professor – the cognitive aspect of authority; 2) degree to which the associate professor is able to create trust in his/her knowledge, experience, attitude – this is the emotional aspect of authority; 3) degree to which the associate professor as an essential source of information – this is the cognitively emotional aspect of authority because changes are possible only in case of trust in the associate professor is able to support students' readiness to change their opinions, acknowledges to change their behaviour, motivate for real action – this is the cognitive behaviour aspect of authority because the behavioural aspect should be studied experimentally and longitudinally.

The second dimension (factor model) is reliance on the associate professor's epistemic authority, which includes concrete reasons (at the same time, they are also substantiation of reliance, which can also be defined as factors). The third dimension (factor model) is substantiation of reliance on the associate professor's epistemic authority (they may also be defined as factors), i.e., the degree to which the student acknowledges that presence or absence of the reason for reliance influences the student's decision to accept the information (knowledge, experience, attitudes) provided by the associate professor as essential information in the cognitive, emotional, and cognitive behaviour aspect. The content of associate professor's epistemic authority and its significance in the process of studies occurs also in interaction over extended period of time, i.e. evaluations provided by graduates of institutions of higher education for the three dimensions of the associate professor's epistemic authority includes three dimensions of meaning: student-perceived authority of associated professors, reasons for reliance, substantiation of reliance, and the fourth dimension (factor model), i.e. the dimension of time.

The results of empirical study among students and graduates of Latvian institutions of higher education allowed to identify, in student and graduate samples, three factor models determining epistemic authority of associate professors: the cognitively emotional aspect of the associate professor's epistemic authority which revealed the importance of the associate professor's knowledge and experience as well as impartiality; transfer which revealed how attitude of other reference persons towards the associate professors; similarities between the associate professor and the student which revealed the impacts of similar thinking and personal traits on taking the decision to rely on the associate professor as an essential source of information. The factor model of impartiality of the associate professor could be singled out in the sample of students, which revealed links between perception of impartiality and associate professor's understanding of the student's needs and interest in student's well-being. The factor model "emotional aspect of epistemic authority" could be singled out in the sample of graduates which revealed close links between the reasons for reliance: associate professor's interest in student's well-being and associate professor's understanding of the needs of the student and their role in making the decision in favour of trusting the associate professor as an essential source of information. The significance of the factor of time demonstrated differences between the distribution of factors and values in the sample of graduates.

The obtained results of evaluation of epistemic authority of associate professors show the role of authority as a social and psychological resource which opens opportunities for improvement of the quality of the relationships between the associate professor and students and thereby improve the quality of studies.

#### **References:**

- 1. Baldwin A. S., Kiviniemi M. T., Snyder M. (2009). A Subtle Source of Power: The Effect of Having an Expectation on Anticipated Interpersonal Power, The Journal of Social Psychology, 149(1), p. 82 104.
- 2. Blass T., Schmitt C. (2001). The nature of perceived authority in the Milgram paradigm: Two replications. Current Psychology, v 20, p.115 121.
- 3. Brauer M., Bourhis R. Y. (2006). Social power. *European Journal of Social Psychology*, vol. 36, Issue 4, p.601-616.
- 4. Buehl M. M., Alexander A. P. (2005). Motivation and Performance Differences in Students' Domain-Specific Epistemological Belief Profiles, *American Educational Research Journal*, v 42, n 4, p. 697-726.
- 5. Dirks K. T., Ferrin D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87, p. 611- 628.
- 6. Glenn P., LeBaron C. (2011). Epistemic authority in employment interviews: Glancing, pointing, touching. *Discourse & Communication*, 5(1), p. 3–22.
- Hallett D., Chandler M. J., Krettenauer T. (2002). Disentangling the course of epistemic development: Parsing knowledge by epistemic content. *New Ideas in Psychology*, 20, p. 285 -307.
- 8. Heritage J., Raymond G. (2005). The Terms of Agreement: Indexing Epistemic Authority and Subordination in Talk-in-Interaction, *Social Psychology Quarterly*, v 68, n 1, p. 15 38.
- 9. Iyer R., Muncy A. J. (2008). Service Recovery in Marketing Education: It's What We Do That Counts, *Journal of Marketing Education*, v 30, p. 21 32.
- 10. Jillapalli K. R., Wilcox B. J. (2010). Professor Brand Advocacy: Do Brand Relationships Matter? *Journal of Marketing Education*, v 32, p. 328 340.
- Kruglanski A. W., Raviv A., Bar-Tal D., Raviv A., Sharvit K., Ellis S., Bar R., Pierro A., Mannetti L. (2005). Says who?: Epistemic authority effects in social judgment. In M. P. Zanna (Ed.), Advances in experimental social psychology, vol. 37, p. 346-392.
- Lucey T. A., Hill-Clarke K. Y. (2008). Interpreting School Authority Structures in Public Education, Educational Studies: *Journal of the American Educational Studies Association*, v 44, n 2, p. 142 – 154.
- Lynn P. C. (2011). Student evaluations of teaching: effects of the Big Five personality traits, grades and the validity hypothesis, *Assessment & Evaluation in Higher Education*, volume 36, Number 2, p. 239-249.
- Ordonez G. X., Ponsoda V., Abad J. F. and Romero J. S. (2009). Measurement of Epistemological Beliefs: Psychometric Properties of the EQEBI Test Scores, *Educational and Psychological Measurement*, v 69, p. 287 – 302.
- 15. Quiamzade A., Mugny G., Chatard A. (2009). When teaching style matches students' epistemic (in) dependence: The moderating effect of perceived epistemic gap, *European Journal of Psychology of Education*, v XXIV, n 3, p. 361-371.

- 16. Pace J., Hemmings A. (2007). Understanding Classroom Authority: Theory, Ideology, and Research on Practice, Review of Education Research, vol. 77, n 1, p. 4–27.
- Patchen T., Crawford T. (2011). From Gardeners to Tour Guides: The Epistemological Struggle Revealed in Teacher-Generated Metaphors of Teaching, *Journal of Teacher Education*, v62, p.286 – 298.
- 18. Raviv A., Bar-Tal D., Raviv A., Abin R. (1993). Measuring epistemic authority: studies of politicians and professors, *European Journal of Personality*, v7, p.119 138.
- 19. Raviv A., Bar-Tal D., Raviv A., Biran B., Sela Z. (2003). Teachers' Epistemic Authorities: Perceptions of Students and Teachers, *Social Psychology of Education*, v6 (1), p.17 42.
- 20. Ricco R., Schuyten Pierce S., Medinilla C. (2010). Epistemic Beliefs and Achievement Motivation in Early Adolescence, *The Journal of Early Adolescence*, v30, n2, p.305 – 340.
- Schmidt A. T., Houston B. M., Bettencourt A. L., Boughton D. P. (2003). The Impact of Voice and Justification on Students' Perceptions of Professors' Fairness, *Journal of Marketing Education*, v25, p.177 – 186.
- Tremayne M., Chen X., Figur N., Huang J. S. (2008). Perceived authority and communication channel: Experiments with instant messaging. *Social Science Computer Review*, 26(2), p.178-189.
- 23. Yariv E. (2009). Students' Attitudes on the Boundaries of Teachers' Authority, School Psychology International, 30: 92, p.92-111.
- 24. Воробьев А. В. (1997). Персонология: проблемы содержания и активности личности. Даугавпилс.
- 25. Кондратьев, М. Ю. (1987) Взаимосвязь авторитета личности и авторитета роли учителя, Вопр. психологии. № 2.
- 26. Петровский А. В. (1984). Личность. Деятельность. Коллектив. (Над чем работают, о чем спорят философы). М.: Политиздат.

#### ESTIMATED ROLE OF CONSERVATISM IN STUDY ENVIRONMENT

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**Abstract:** The article supports the topicality of the research of conservatism in social psychology through a meta-analysis of studies (1970 - 2011). In accordance with the social constructivism and social epistemology approaches in education, which propose the idea of knowledge creation in the process of interaction, the authors support the necessity for research of conservatism as a potentially obstructive factor in these processes in the study environment of institutions of higher education. The Aim of the Study was to analyse the concepts of conservatism and research methodologies in social psychology and to explain the results of the empirical study on the types of conservatism among professors (N=171) and students (N=307) in various institutions of higher education in Riga. The article includes an explanation for the potential application of the conservatism research method (Ray, J. J., 1983) in the Latvian cultural environment. The article analyses the differences of general social, moral and economic conservatism as a personality feature and attitude in associate professors and students in various study areas: the social, the arts, and the sciences; the role of conservatism in the process of studies is demonstrated relying on the results of the meta-analysis of concepts and the empirical research. The authors propose issues for further research of conservatism in the study environment of institutions of higher education.

Keywords: conservatism, conservatism scales, social psychology, higher education.

#### Introduction

Researchers of constructive sociology of knowledge (Knorr-Cetina, 1997; Miettinen, Virkkunen, 2005) believe that, in the contemporary society, knowledge construction is becoming more and more important in the work of any expert (i.e. professors). The report for the Organisation of Economic Cooperation and Development (OECD) shows the relationship between leadership and school improvement in the world's highest performing country (Hargreaves, Halász, & Pont, 2008). Associate professors and students of institutions of higher education are involved in knowledge construction processes, and, therefore, their openness to new experience, innovation is topical. Students and associate professors' formal and actual ability to manage students' social activity in satisfaction of their interests and needs (Asmuß, Svennevig, 2009). In such situation, the concepts of authority, authoritarianism, and the related concept of conservatism become topical. Conservatism and authoritarianism are interrelated concepts united by presence or absence of personal trait "openness to experience" (Saucier, 2000). For this reasons conservative authoritarianism is researched (Harber, 2005).

The Aim of the Study was to analyse the concepts of conservatism and research methodologies in social psychology and to explain the results of the empirical study on the types of conservatism among professors (N=171) and students (N=307) in various institutions of higher education in Riga.

Conservative authoritarianism is linked with authoritarian personality concepts (Adorno, 1950) used also in studies on attitude towards authority (Ray, 1971). Conservatism is analysed in context with authoritarianism, and implementation of authority functions in organisations; in comparison of liberalism-conservatism factors (Ray, 1971, 1973). Researchers, therefore, emphasise the positive aspect and the negative aspect of authority – authoritarianism or inadequate bureaucratic authority which interferes with successful interaction in the process of studies (Harjunen, 2009). These issues can be minimised by creation of a structure of authority which combines three components: freedom, power, and legitimacy (Goodman, 2010). Research in conservatism of associate professors is topical to explain the varieties of pedagogical leadership between orthodox approach and flexibility (Fitzgerald,

Gunter, 2008), which cannot be implemented unilaterally without involvement of students; therefore, research in conservatism of students is also topical. Research shows that traits of conservative individuals develop under influences of repressive pedagogy (Ray, 1983).

Research in attitudes of students towards institutional authority (Rigby, Rump, 1982) has led to conclusions that essential signs of authoritarianism include: intolerance towards uncertainty, tolerance towards complexity, dogmatism, cognitive simplicity/naiveness, creative independence, emotional activation. When researching students (Ray, 1979), concluded that there are links between conservative pro0authority attitudes and signs of authoritarianism. It has also been concluded that the symptom of authoritarianism is related to compensation for psychological insecurity (Rigby, Rump, 1982). In later studies, these items are linked with implementation of associate professors' personal and positional power (Chiang, 2009).

Conservatism is researched in the context of attitudes, asking the respondent to evaluate, describe, or assess himself/herself or his/her behaviour, express opinion about some items outside him/her (Ray, 1983). McClosky believed that more significance should be attributed to the content of conservative beliefs (McClosky, 1958). This belief is characterised by opinions that one should resist change and observe order if only it is possible not to change things. Conservatism involves belief that order, authority is primary protection against violence and anarchy, and therefore there should be more obligations than rights. Consequently, conservative individuals prefer hierarchical social structures and appreciate authority and obligation (Ray, 1983). However, research shows that conservative individuals demonstrate less initiative at work, they find it more difficult to adapt in varying, uncertain working environments (Fay, Frese, 2000), that conservatism is the most apparent obstacle to implementation of changes in the work of pedagogues (Hargreaves, 2009).

#### **Materials and Methods**

The study was conducted in 2011 by surveying 171 professors and 307 students in various institutions of higher education in Riga. The professors and students represented three study areas: social, arts, sciences. The "convenient selection" method was used to form the study sample. Conservatism research methodology approbated by the authors and consisting of three scales was used in the study: General Social Conservatism scale; Moral Conservatism scale; Economic Conservatism scale (Ray, 1983). The questionnaire developed by the authors was published on website.

The results were analysed using the Descript Statistic and Mann-Whitney Test.

#### **Results and discussion**

Comparison of the results included assessment of the central tendency indicators Mean and Standard Deviation (Table 1).

Table 1

-	Group/conservatism scales		General Social Conservatism	Moral Conservatism	Economic Conservatism
Students	Sample	Μ	3.067	2.430	2.734
	(N = 152)	S	0.318	0.589	0.464
	Social	М	3.085	2.455	2.713
	(N = 51)	S	0.283	0.709	0.469
	Arts	М	3.004	2.309	2.666
	(N = 50)	S	0.357	0.536	0.468
	Sciences	М	3.110	2.524	2.819
	(N = 51)	S	0.303	0.489	0.447

## Central tendency indicators of self-evaluation for conservatism in student and associate professor samples

-	Group/conservatism scales		General Social Conservatism	Moral Conservatism	Economic Conservatism
Professors	Sample	М	3.069	2.731	2.702
	(N = 171)	S	0.345	0.695	0.450
	Social	М	3.036	2.547	2.784
	(N = 55)	S	0.313	0.737	0.426
	Arts (N = 62)	М	3.163	2.824	2.626
		S	0.303	0.593	0.383
	Sciences (N = 54)	М	2.998	2.815	2.707
		S	0.399	0.735	0.532

The results show that General Social Conservatism is very similar in both samples (M=3.067 in the sample of students; M=3.069 in the sample of professors) – the results are medium-high (maximum possible - M=5.0). It can be seen that, in the groups of study areas, it is higher in the group of students in the area of sciences (M=3.11) and in the group of professors in the area of arts (M=3.16). A comparatively lower General Social Conservatism is in the group of professors in the area of sciences (M=2.99). A comparatively lower General Social Conservatism is in the group of professors in the area of sciences (M=2.99). It can be seen that, in the groups of study areas, it is higher in the group of students in the area of sciences (M=2.52) and in the group of professors in the area of arts (M=2.82). A comparatively lower Moral Conservatism is in the group of students in the area of arts (M=2.30). Economic Conservatism, like General Social Conservatism, is very similar in both samples (M=2.73 in the sample of students; M=2.70 in the sample of professors), i.e. medium. It can be seen in the groups of study areas that it is higher in the group of students in the area of sciences (M=2.81); in the sample of professors, Economic Conservatism is higher in the groups of professors in the social area (M=2.70) and the area of sciences (M=2.70), compared to the group of professors in the area of arts (M=2.62). The standard deviation for all measurement in all groups is comparatively small, and this suggests an even distribution of the results.

Table 2

Group/conservatism scales	General		Mor		Econo	
	Conserv	atism	Conservatism		Conservatism	
Statistic indicators	Ranges	р	Ranges	р	Ranges	р
Students (N=307) – Associate	239,69	0,967	215,33	0,000	242,30	0,552
professors (N=171)	239,15		282,89		234,47	
Area of arts students (N=101) – Associate professors (N=55)	80,47	0,461	75,99	0,347	76,09	0,366
	74,89		83,11		82,92	
Arts: students (N=101) – Associate professors (N=62)	74,20	0,007	66,17	0,000	83,37	0,635
	94,71		107,79		79,77	
Sciences: students (N=105) – Associate professors (N=54)	85,91	0,024	72,41	0,004	82,93	0,261
	68,51		94,76		74,30	

#### Importance of differences in the results of self-evaluation for conservatism in student and associate professor samples

The results of the Mann-Whitney Test showed significant differences (p < 0.05 - p < 0.01) in students and professors' self-evaluation for conservatism. Very significant differences (p < 0.01) were found for Moral Conservatism Scale in the professor and student samples (the ranges of the results show that the results of students are more significant in the determination of the difference). In the area of arts, no significant differences between the results of professor and student groups were found in any of the items. Very significant differences were found in the groups of the area of arts for General Social Conservatism Scale (p < 0.01) and Moral Conservatism Scale (p < 0.01). The ranges of the results show that the results of students, which were lower, are more significant in determination of the differences were found in the groups of the area of sciences: General Social Conservatism Scale (p < 0.05) and Moral Conservatism Scale (p < 0.01). The ranges of the results of the results show that the results of students show that the results of sciences: General Social Conservatism Scale (p < 0.05) and Moral Conservatism Scale (p < 0.01). The ranges of the results show that the results of professors for General Social Conservatism Scale (p < 0.05) and Moral Conservatism Scale, which were lower, and the results of students for Moral Conservatism Scale, which were lower, are more significant in determination of the difference (Table 2).

The results of conservatism can be explained by the relation between Right-Wing Authoritarianism (RWA) and Social Dominance Orientation (SDO) and the conclusions drawn in the studies: that the value dimension Openness to Change vs. Conservation will have an effect on prejudice and Cultural Conservatism (which includes signs of General Social Conservatism and Moral Conservatism) but not on Economic Conservatism and that these effects will be mediated by RWA, and that the value dimension Self- Enhancement vs. Self-Transcendence will have an effect on prejudice and Economic Conservatism but not on Cultural Conservatism and that these effects will be mediated by SDO (Duriez, Van Hiel, Kossowska, 2005).

It should be noted that Moral Conservatism and General Social Conservatism (Ray, 1983) include questions about attitude towards information regarding sexuality, which is a sensitive question in the context of conservatism, and there are gender and age variations in the evaluations (Gelbal, Duyan, Öztürk, 2008). In study environment, conservatism should be researched in the context of academic freedom and a conservative social and political culture (Williams, 2006), because important are student perceptions of a 'liberal'/'conservative' conflict in the social and educational environment of individual experience, educational processes, and broader socio - political climate (Fram, Miller – Cribbs, 2008).

#### Conclusions

Conservatism of students and professors is related to the context of academic freedom and liberal or conservative social and political culture, openness to change of the persons involved in professional interaction, which facilitates or hinders transition from orthodox approach to flexibility in the management of the process of studies. The study conducted by the authors of the article highlight tendencies of conservatism in students and professors and shows directions of further research to detail generally medium and medium high conservatism result causes in student and professor samples.

The empirical study shows that no differences in students and professors' self-evaluation for conservatism can be found for Economic Conservatism and General Social Conservatism. However, Moral Conservatism is higher in the sample of professors. Since lower conservatism results have more significant impacts on the differences of the results, further research is necessary to find out what degree of conservatism is constructive.

#### **References:**

- 1. Adorno T. W., Frenkel-Brunswik E., Levinson J., Sanford R. N. (1950). *The Authoritarian Personality*. Science Editions, Wiley, New York.
- 2. Asmuß B., Svennevig J. (2009). Meeting Talk: An Introduction, *Journal of Business Communication*, v 46, p.3 22.
- 3. Chiang S.Y. (2009). Personal power and positional power in a power-full 'I': a discourse analysis of doctoral dissertation supervision, *Discourse & Communication*, v3, n3, p. 255 271.

- 4. Duriez B., Van Hiel A., Kossowska M. (2005). Authoritarianism and Social Dominance in Western and Eastern Europe: The Importance of the Sociopolitical Context and of Political Interest and Involvement, *Political Psychology*, vol. 26, No. 2, 2005, p. 299-320.
- 5. Fay D., Frese M. (2000). Conservatives' Approach to Work: Less Prepared for Future Work Demands?, *Journal of Applied Social Psychology*, vol. 30, Issue 1, p. 171-195.
- 6. Fitzgerald T., Gunter H. M. (2008). Contesting the orthodoxy of teacher leadership, *International Journal of Leadership in Education*, 11: 4, p.331 340.
- Fram M. S., Miller-Cribbs J. (2008). Maryah Stella Fram & Julie Miller-CribbsLiberal and Conservative in Social Work Education: Exploring Student, *Experiences Social Work Education*, vol. 27, No. 8, p. 883–897.
- 8. Gelbal S., Duyan V., Öztürk A. B. (2008). Gender differences in sexual information sources, and sexual attitudes and behaviors of university students in Turkey, *Social Behavior and Personality*, 36(8), p.1035-1052.
- 9. Goodman J. (2010). Student authority: Antidote to alienation, *Theory and Research in Education*, v 8, p. 227 247.
- 10. Harber C. (2005). Reflections on the new conservatisms, *Educational Review*, vol. 57, No.3, p. 295 297.
- 11. Hargreaves A., Halász G., Pont B. (2008). The Finnish approach to system leadership. In B. Pont, D. Nusche, & D. Hopkins (Eds.), *Improving school leadership, Vol. 2: Case studies on system leadership,* p. 69–109.
- 12. Hargreaves A. (2010). Presentism, Individualism, and conservatism: The Legacy of Dan Lortie's, *Schoolteacher: A Sociological Study*, vol. 40, Isue1, p. 143-154.
- 13. Harjunen E. (2009). How do teachers view their own pedagogical authority?, *Teachers and Teaching*, 15: 1, p. 109 129.
- 14. Knorr Cetina K. (1997). Sociality with objects: social relations in postsocial knowledge societies. Theory, culture & society, 14(4), 1-30.
- 15. McClosky H. (1958). Conservatism and personality. American Political Science Review. 52, 27-45.
- 16. Miettinen R., Virkkunen J. (2005). Epistemic Objects, Artefacts and Organizational Change, *Organization*, v 12, p. 437 – 456.
- 17. Ray J.J. (1971). An "Attitude to Authority" scale, Australian Psychologist, 6, p. 31-50.
- 18. Ray J. J. (1973). Conservatism, Authoritarianism and Related Variables, *Review and Empirical Study*.
- 19. Ray J. J. (1979). Journal of Social Psychology, vol. 108, Issue 2, p. 271.
- 20. Ray J. J. (1983). The workers are not authoritarian: Attitude and personality data from six countries, *Sociology & Social Research*, 67 (2), p. 166-189.
- 21. Rigby K., Rump E. E. (1982). Attitudes toward authority and authoritarian personality characteristics', *The Journal of Social Psychology*, v116 (1), p. 61 72.
- 22. Saucier G. (2000). Isms and the Structure of Social Attitudes, *Journal of Personality & Social Psychology*, Vol. 78, Issue 2, p. 366-385.
- 23. Williams R. (2006). Academic Freedom in Higher Education Within a Conservative Sociopolitical Culture, *Innovative Higher Education*, vol. 31, No. 1, p. 5-25.

#### INTERRELATION OF FIRST-SEMESTER STUDENTS' DEPRESSION WITH SOCIAL SUPPORT AND HARDINESS

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Abstract: The research analyses adaptation of the first-semester students in the environment of the university. Negative tendencies related to wellbeing, mental and physical health of the first-semester students have already been found in the previous studies in Latvia, Lithuania, the USA, and Russia. Depression is listed as one of the most essential negative expression of stress. The issue of the research - which psychological factors further stress management (in hardiness) and how they affect expressions of depression (severity). The research of the correlation shows statistically significant correlation among individual features. After dividing students depending on their depressiveness into groups with relatively high and low level of hardiness, it was concluded that there were more students with high hardiness indicators dominated in the groups with mild (BDI-II scores: 14 - 19) and moderate depression (BDI-II scores: 20 - 28), the differences among the groups were statistically significant ( $\chi 2 = 16.09$ ; p <0.001).

Keywords: first-semester students, depression, social support, hardiness.

#### Introduction

As for spectrum of difficulties, there are similar tendencies for new students while they are adapting in the university environment in Latvia, Lithuania and the USA (Voitkāne & Miezīte, 2001; Balaisis, 2002; Galagher, Golin & Kelleher, 1992). The research of the first-semester students of the University of Latvia carried out by S. Voitkane and S. Miezite in spring of 2001 shows serious problems associated with their wellbeing, mental and physical health. Students often pointed out to various problems related to their emotional state. The study of the environment of the Russian students also shows similar tendencies – 25% of the first-semester students experience emotional disadaptation and high level of stress (Холмогорова, Гаранян, Евдокимова, Москова, 2009).

Young people of this age group are still searching for their identity; they have to develop a new identity along with the studies, and have to master a new social role which may cause emotional disadaptation.

The way each person views himself/herself as a student of the university determines how he/she will perform the tasks and requirements set by the university. Thus, successful adaptation is individually and socially important.

Researchers consider interpersonal functioning, eating and sleeping habits, feelings, selfassessment/attitude towards himself/herself, understanding of problems and circumstances, emotional state, critical thinking, relationships with other people, social support of family, availability and quality of support, division of responsibility in family, relationships with peers, the number of close friends and quality of relationships, leisure activities among peers, frequency and peculiarity of conflicts with peers, alignment with the university, i.e., an opinion about the university, enjoyable and less enjoyable study courses and the teaching staff, extracurricular activities, conflicts within the university, as well as involvement in the community (clubs, societies, parties, churches, sport teams), nature of social support perceived from community, mobility within the borders of community, and employment as essential and important areas of the research to understand students' depression. (Merrell, 2008, 55-56)

The researchers M. Heath and D. Sheen emphasize that, when rendering help to a depressive student and preventing depression, it is important to develop and improve student's social competencies enabling him/her to receive and to give necessary support within the social network. The student would have to master an ability to collaborate, listen to, encourage, keep an eye contact, provide feedback, solve conflicts, and adequately endure rejections. (Heath, Sheen, 2005, 114) They suggest the teaching staff to be aware of how students' state of mind affects their studies; besides, they

emphasize that the teaching staff has to help students to develop a positive life history; as well as they have to help a student to feel loved and accepted; it is necessary to respond to one's behaviour instead of his/her personality. It is possible to help a depressive student by accepting his/her uniqueness, encouraging him/her in decision-making, maintaining stabile, predictable and relatively unchangeable requirements during the study process, as well as by helping him/her to develop closer relationships with his/her family, professionals and supportive (providing support) peer group. (Heath, Sheen, 2005, 112)

The symptoms of depression among the children and young people depend on their age and sex; however, they have a tendency to increase as the age of the respondents increases. The symptoms of depression are found in 1-2% of the children and 1-7% of the young people. Depression of the young people features low spirits, tearfulness and/or rage, negative view of themselves, world (environment) and future, problems in mutual relationships, low interest in the surrounding world, low participation in various activities, poor/low problem solving abilities, inadequate thinking, loss of appetite, sleeplessness, psychomotor excitation, tiredness, and suicidal thoughts. (Swearer, Collins, Radliff, Wang, 2011, 46)

Two models are more frequently considered in the literature as for interconnections of social support and effective functioning of children and young people – the stress buffering model and the main effect model. The stress buffering model (Cohen, Underwood, Gottlieb, 2000) features the role of social support in stressful situations. The social resources and support prevent potential pathogenic consequences of stressful events. According to the authors of the theory, it is done by redefining the situation, thus, reducing its subjective significance, as well as reducing affective tension and possibility of inadequate, unconsidered behaviour. (Cohen, Pressman, 2004, 780-781) Social support reduces impetuousness, depression, protects from using the substances causing addictions. (Demaray, Malecki, 2011, 183)

The theories emphasizing the main effect model, in their turn, highlight the fact that social support increases individual's self-esteem and belief in one's own abilities to influence events and environment (Cohen, 1988), psychological status, feelings of security, stability, self-esteem and acceptance, and reduces possibilities of having mental problems. (Demaray, Malecki, 2011, 183) The research shared by the German and Polish researchers (Schaarschmidt, Arnold, Ronginska, 2000) found out that social support is an important factor affecting mental health, as the basis of it is an interaction with other people. It can be implemented both as emotional support (help), by solving problems, and as help rendered by specific individuals, providing feeling of security. (Schaarschmidt, Arnold, Ronginska, 2000)

According to the researchers (Coon, Mitterer, 2007, 514), the symptoms of depression are experienced by approximately 80% of the college students, 16–30% of the students suffer from depression during the academic year. The reasons are as follows: the difference between the study process of the university and that of a school; loss of the old social support groups (a family, class-mates, school time friends), isolation, loneliness, learning difficulties, academic problems (high achievement motivation + small experience of loss); problems of close relationships with an opposite sex; difficulties to maintain an ideal behavioural model; excessive usage of alcohol (as depressant). (Coon, Mitterer, 2007, 514)

S. Maddi, in his turn, names hardiness, as well as optimism and religiosity as the most important stress management factors (Maddi, 2006). Hardiness is a combination of attitudes making it possible to change stressful circumstances from potential calamity into the opportunity for growth, using courage and determination. Researchers (Maddi, Khoshaba, 2001) emphasize that to maintain optimal level of health, working capacity and activity in stressful circumstances, all three factors are equally important. A higher level of those components prevents inner tension in stressful situations due to hardy coping and perception of it as less significant.

Hardiness, as a stable personality disposition is formed from three interrelated beliefs: commitment (i.e. a tendency to involve oneself in the activities in life and having a genuine interest in and curiosity about the surrounding world (activities, things, other people)), control (i.e. a tendency to feel and act as if one can influence the events taking place around oneself through one's own effort), and challenge (i.e. a belief that change, rather than stability, is the normal mode of life and constitutes

motivating opportunities for personal growth rather than threats to security). Hardy individuals tend to interpret demanding situations, such as highly competitive sporting contests, in less stressful ways because they view them as desirable, controllable, and challenging. In the early days of hardiness research, it was usually defined as a personality structure comprising the three related general dispositions of commitment, control, and challenge that functions as a resistance resource in the encounter with stressful conditions. Nowadays, researchers consider hardiness as a broad personality style or generalized mode of functioning that includes cognitive, emotional, and behavioural qualities. This generalized style of functioning, is believed to affect how one views oneself and interacts with the world around. (Maddi, Khoshaba, 2001; Bartone, 2006)

The issue of the research is as follows: which psychological factors further stress management (hardiness) and how they affect expressions of depression (severity).

#### Materials and methods

The research was carried out at Latvia University of Agriculture with participation of 82 firstsemester students. The participants of the study were 65 female and 17 male first-semester students between the ages of 19 to 22 who were drawn from the Faculty of Economics of Latvia University of Agriculture. The gender distribution was approximately proportionate to that within the student body of the Faculty of Economics of Latvia University of Agriculture, in which four fifths of the students are female and one fifth is male.

The students were provided with a package of questionnaires in their classes. The questionnaires were handed out to the students which after filling them out personally returned them back to the researchers. The questionnaires were filled out both in the classrooms, and outside of them. Most of them (approx. 75%) filled the questionnaires out in the classrooms.

The Personal Views Survey (45 items), consists of 3 subscales: commitment (18 items); control, (17 items); challenge, (10 items). According to Likert-type scale the respondents had to choose out of four possible answers: "yes", "rather yes than no", "rather no than yes" and "no". The answers were coded in further processing according to the pattern provided in the methodological material. The survey has acceptable validity and internal consistency, Cronbach alpha for hardiness was found to be 0.80 (for commitment – 0.59, control – 0.63, challenge – 0.57).

The Commitment scale is interpreted as a belief that commitment provides maximal possibility to enjoy one's activity.

The Control scale is a belief that a struggle provides for an opportunity to influence the result of the ongoing activities, though, influence is not absolute and success is not guaranteed. An individual with high indicators in this scale feels that he himself/she herself chooses his/her behaviour and tactics for specific situations.

The Challenge scale shows individual's belief that everything furthers his/her growth due to knowledge he/she gets from his/her experience - whether positive or negative. An individual with high indicators perceives life as an opportunity to obtain experience; he/she is ready to act even there is no success guaranteed. (Maddi, Khoshaba, 2001; Леонтьев, Рассказова, 2006)

Multidimensional Scale of Perceived Social Support (MSPSS), originally developed on university students, provides assessment of three sources of support: family (FA), friends (FR), and significant other (SO), accordingly contains three subscales—family (4 items), friends (4 items), and significant other support (4 items). The respondents had to mark the items they agree with. The maximal possible score for each subscale was 4, the total score of the questionnaire was 12, and the minimal score was 0. (Zimet, Dahlem, Zimet, Farley, 1988; Карвасарский, 2004)

Zimet and his colleagues have argued well the unique features of this scale. First, it is short (12 items in total) and is ideal for research that requires assessment of multiple variables and populations which, for one reason or another, cannot tolerate a long questionnaire. Second, a point related to above, MSPSS items are easy to understand and are therefore suitable for young populations or populations with limited literacy level. Third, despite being a brief instrument, MSPSS measures support from three sources, and in particular, the SO subscale is rather unique among measures in the field. Who the "significant other(s)" is left to the respondent to define. Researchers argued that the SO subscale is a strong supplement to the family and the friends subscales because it taps a different

support source for the student, such as boyfriend/girlfriend, teacher and counsellor (Zimet, Dahlem, Zimet, Farley, 1988).

Beck Depression Inventory (BDA–II) is a self-report instrument for measuring the severity of depression in adults and adolescents aged 13 years and older. It consists of 21 items, further divided into Cognitive –Affective and Somatic scales. Items are organized according to the severity of the content of the statements to be selected, and each item is rated on a four-point scale ranging from 0 to 3 in terms of severity. BDI–II Cronbach  $\alpha = 0,87$ . (Beck, Steer, Brown, 1996; Beck, Alford, 2009)

Interpretation of the BDI-II results: 0-13: minimal depression; 14-19: mild depression; 20-28: moderate depression; and 29-63: severe depression. The BDI – II, unlike the BDI, matches more precisely with the depression criteria included in the DSM – IV (The Corsini Encyclopedia of Psychology, 2010, 210).

#### **Results and discussion**

The central tendency indicators are reflected in the Table 1. Using the Mann-Whitney U criteria, it was found that there were no significant differences in total assessments of hardiness, perceived social support and depressiveness among the answers provided by males (n = 17) and females (n=65) (all calculated p > 0.05). Statistically significant differences were observed in the Control and Challenge subscales, average indicators of control and challenge provided by male students were significantly higher than those provided by female students. As shown in the Table 3, at least a mild level of depression was observed in 31.7% of the sample.

Table 1

	Sample	M (Mean)	<b>SD</b> (Standard Deviation)	Min	Max	Mann- Whitney U	<i>p</i> (Asymptot ic Significan ce (2- tailed))
Perceived social support scale	All, n=82	10.62	1.98	0	12	476.50	0.353
Hardiness, Commitment subscale	All, n=82	29.74	4.93	19	40	438.50	0.190
Hardiness, Control subscale	Female, n=65	25.23	5.44	13	35	254 50	0.023
Hardiness, Control subscale	Male, n=17	28.71	5.58	18	39	354.50	
Hardiness, Challenge subscale	Female, n=65	14.48	3.34	7	21	262.00	0.020
Hardiness, Challenge subscale	Male, n=17	16.53	3.36	9	22	362.00	0.029
Hardiness, total	All, n= 82	70.60	12.12	43	99	465.50	0.319
Depression, Cognitive- Affective subscale	All, n= 82	5.61	4.86	0	16	462.00	0.299
Depression, Somatic subscale	All, n= 82	3.04	3.42	0	13	507.00	0.594
Depression, total	All, n= 82	8.65	7.66	0	27	482.50	0.422

### Minimal and Maximal Scores, Central Tendency Indicators and Importance of Differences in Results in Female and Male Samples

Table 2

	Correlation Coefficients (Spearman's rho)										
		1	2	3	4	5	6	7			
1	Perceived social support	-									
2	Hardiness, Commitment subscale	0,18	-								
3	Hardiness, Control subscale	0,16	0,61 <sup>a</sup>	-							
4	Hardiness, Challenge subscale	0,33 <i>ª</i>	0,50 <sup><i>a</i></sup>	0,57 <sup>a</sup>	-						
5	Hardiness, total	0,24 <sup>b</sup>	0,84 <sup>a</sup>	0,88 <sup><i>a</i></sup>	0,77 <i>ª</i>	-					
6	Depression, Cognitive- Affective subscale	-0,38 <sup>a</sup>	-0,48 <sup>a</sup>	-0,39 <sup>a</sup>	-0,70 <sup><i>a</i></sup>	-0,61 <sup>a</sup>	-				
7	Depression, Somatic subscale	-0,36 <sup><i>a</i></sup>	-0,28 <sup>b</sup>	-0,19	-0,55 <sup>a</sup>	-0,40 <sup><i>a</i></sup>	0,72 <i>ª</i>	-			
8	Depression, total	-0,39 <sup><i>a</i></sup>	-0,45 <sup>a</sup>	-0,35 <sup>a</sup>	-0,71 <sup><i>a</i></sup>	-0,58 <sup>a</sup>	0,96 <sup><i>a</i></sup>	0,87 <i>ª</i>			
Significance (2-tailed): <sup><i>a</i></sup> – Correlation is significant at the 0.01 level ( $p < 0.01$ ) <sup><i>b</i></sup> – Correlation is significant at the 0.05 level ( $p < 0.05$ )											

Intercorrelation Matrix

The study of correlations shows the statistically significant correlations among individual features. Perceived social support significantly correlates with the Hardiness, Challenge subscale (p < 0.01), and also with the Total Hardiness scale (p < 0.05), thus, confirming the role of social support when choosing adequate and responsible behaviour in unpredictable, challenging situations by adequately assessing and applying present and past events and life experience.

When comparing the Hardiness scales, its individual subscales and Depression Inventory with the coefficients of the individual subscales, it was found that they were similar to the results obtained during adaptation carried out in Russia in 2006 (Леонтьев, Рассказова, 2006). The negative correlation of the Hardiness and depression indicators is found in the studies of students' learning motivation. (Cole, Feild, Stanley, 2004)

The social resources (support) prevent potential pathogenic consequences of stressful events, helping redefine complicated situations, thus, reducing their subjective meaning. These resources also reduce affective tension and possibility of inadequate, unconsidered behaviour (Cohen, Pressman, 2004,780-781), on the one hand, increasing self-esteem and belief in one's abilities to influence events and environment, psychological status, feeling of security, stability, self-esteem and acceptance, and on the other hand, reducing possibility of causing mental problems in future (Demaray, Malecki, 2011, 183)

Statistically significant (p < 0.01) negative correlation of the results of the perceived social support scale and Beck Depression Inventory was found in the research, showing that when the MSPSS results increase, depression indicators reduce and vice versa. It would be reckless to state that perceived social support reduces the symptoms of depression.

Depression among the young people features low spirits, tearfulness and/or rage, negative view of themselves, world (environment) and future, problems in mutual relationships, low interest in the surrounding world, low participation in various activities, poor/low problem solving abilities, inadequate thinking, loss of appetite, sleeplessness, psychomotor excitation, tiredness and suicidal thoughts (Swearer, Collins, Radliff, Wang, 2011, 46), therefore, it is possible that the interconnection is opposite – assessment of social support by depressive students is lower due to directly expressed symptoms of depression.

By dividing students depending on their depressiveness into groups of relatively high and low level of hardiness, we concluded that there were more students with high hardiness indicators in the group with a low level of depression (BDI-II scores: 0 - 13), however, there were more students with low indicators of hardiness in groups with mild (BDI-II scores :14 - 19) and moderate depression (BDI-II scores: 20 - 28) (Table 3), the differences among the groups were statistically significant ( $\chi 2 = 16.09$ ; p<0.001).

Interrelations between Hardiness and Depression

Table 3

	Interretations between marumes	s and Depress	IOII			
		Depression				
		Minimal	Mild	Moderate		
Low hardiness,	Count	19	13	8		
n = 40	% within group of low hardiness	47,5%	32,5%	20,0%		
High hardiness,	Count	37	2	3		
n = 42	% within group of high hardiness	88,1%	4,8%	7,1%		
Total, n= 82	Count	56	15	11		
	% of Total	68,3%	18,3%	13,4%		
Minimal depression	on BDI-II scores: 0 – 13	1		1		
Mild depression:	BDI-II scores: 14 – 19					
Moderate depress	ion: BDI-II scores: 20 – 28					

#### Conclusions

Results of research indicate that at least a mild level of depression was observed in 31.7% of the sample. The results indicate that students with higher level of perceived social support and hardiness obtained lower scores in all dimensions of depression. The results presented substantiate the close link between depressiveness of first-semester students and their hardiness. Perceived social support and hardiness increase confidence in student's stress management ability. Hardy, socially supported students manage stress better and can use the learning environment more effectively. When encountering difficulties they do not experience increasing depression, because they rely on themselves and evaluate optimistically their ability to resolve difficulties.

#### **References:**

- 1. Balaisis M. (2002). Student Needs at Vilnius University. New Developments in Psychology. In The Baltic's: Theory and Practice. *IV International Baltic Psychology Conference*. University of Latvia, p. 66–70.
- 2. Bartone P. T. (2006). Resilience under military operational stress: Can leaders influence hardiness? *Military Psychology* 18, p.131–148.
- 3. Beck A. T., Steer R. A., & Brown G. K. (1996). *BDI-II Beck Depression Inventory* 2nd ed. Manual. San Antonio, The Psychological Corporation.
- 4. Beck A. T., Alford B.A. (2009). *Depression: causes and treatments*. 2<sup>nd</sup> ed. University of Pennsylvania Press, 405 p.
- 5. Cohen S., & Pressman S. (2004). The stress-buffering hypothesis. In N. Anderson (Ed.), Encyclopedia of Health and Behavior. Thousand Oaks, CA: Sage Publications, p. 780 -781.
- 6. Cohen S., Underwood L., & Gottlieb B. (Eds.) (2000) Social support measurement and *interventions: A guide for health and social scientists.* New York: Oxford, 345 p.
- Cole M. S., Feild H. S., Stanley G. H. (2004). Student Learning Motivation and Psychological Hardiness: Interactive Effects on Students' Reactions to a Management Class. *Academy of Management Learning and Education*, Vol. 3, No. 1, p. 64-85.
- 8. Coon D., Mitterer J.O. (2007). *Introduction to psychology: gateways to mind and behaviour*. Cengage Learning, 700 p.

- Demaray M. K., Malecki C.K. (2011). The Role of Social Support in the Lives of Students Involved in Bullying. In D. Espelage & S. Swearer (Eds.). *Bullying in North American Schools,* 2nd edition, New York, Routledge, p. 182-190.
- 10. Gallagher R. P., Golin A., Kelleher K. (1992). The personal, career and learning skills needs of college students. *Journal of College Student Development*, 33, p.301-309.
- 11. Heath M. A., Sheen D. (2005). *School-based crisis intervention: preparing all personnel to assist*. Guilford Press, 174 p.
- 12. Maddi S. R. (2006). Hardiness: The courage to grow from stresses. *The Journal of Positive Psychology*, vol. 1, Issue 3, p.160-168.
- 13. Maddi S. R., Khoshaba D. M. (2001). Personal views survey (3rd ed., Rev.). Newport Beach, CA, The Hardiness Institute,157 p.
- 14. Merrell K. W. (2008). *Helping students overcome depression and anxiety: a practical guide*. 2<sup>nd</sup> ed., Guilford Press, 265 p.
- 15. Schaarschmidt U., Arnold H., Ronginska T. (2000). Untersuchungen zur psychiscen Gesundheit bei Lehrer – ein Populationsversuch, (Population survey of teachers' mental health) Science -Reserch - Education. Proceedings of the Polish-German Symposium. Zielena Gora. (In German)
- Swearer S. M., Collins A., Radliff K.H., Wang C. (2011). Internalizing problems in students involved in bullying and victimization. (pp. 45 – 54). In Espelage, D. L. Swearer S. M. (2010) *Bullying in North American Schools*. 2nd edition. Taylor & Francis, 315 pp.
- 17. *The Corsini Encyclopedia of Psychology* (2010). Weiner I. B., Craighead W. E. (Eds), vol. one.- 4th ed.- New Jersey: John Wiley and Sons, p. 210-211.
- Voitkāne S. Miezīte S. (2001). Pirmā kursa studentu adaptācijas problēmas (Adaptation problems among first-semester University students). *Journal of Baltic Psychology*, vol. 2, Nr.1, p. 43-53 (In Latvian).
- 19. Zimet G. D., Dahlem N. W., Zimet S. G., Farley G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52, p. 30–41.
- 20. Карвасарский Б.Д. (2004). Клиническая психология. Учебник. (Clinical Psychology. Textbook) М., Геотар Медицина, 864 р. (In Russian).
- 21. Леонтьев Д.А., Рассказова Е.И. (2006). *Тест жизнестойкости*. (The Hardiness Survey) Москва, Смысл, 63 р. (In Russian).
- 22. Холмогорова А.Б., Гаранян Н.Г., Евдокимова Я.Г., Москова М.В. (2009). Психологические факторы эмоциональной дезадаптации у студентов (Influence of psychological factors on students' emotional dezadaptation). *Вопросы психологии*, № 3, р. 16–26. (In Russian).