

## Foreword

The Institute of Education and Home Economics of the Faculty of Engineering, Latvia University of Life Sciences and Technologies organizes annual international scientific conference **Rural Environment. Education. Personality (REEP-2020)**. Authors of the articles are from 13 countries - Canada, Czech Republic, Estonia, Israel, Kazakhstan, Latvia, Lithuania, Nigeria, Norway, Republic of Belarus, Russia, Slovakia, Turkey. Totally 43 educational establishments are represented in the Proceedings.

**Aim of the Conference:** to find out solutions, exchange ideas or highlight topical problems on the 21<sup>st</sup> century education tendencies in university and adult education, competence, education for sustainable development, design and crafts, career development and vocational education. Thematic groups of the articles:

- problems and solutions for nowadays university and adult education;
- education for getting competence;
- education for sustainable development;
- design and crafts;
- development of professional education and career.

The focus of the conference is on educational development trends, new learning strategies and how they could be developed, to improve learners' ability to compete in the labour market and to benefit for society.

The first section **Problems and solutions for nowadays university and adult education** includes researches in the fields of quality assurance of study process in universities, innovations in adult education, new methodologies in music education and language learning, as well as use of information technologies in education.

In recent years the system of **higher education** quality assurance has undergone several essential changes: a greater emphasis is being laid on the development of human capital in regions, on the qualification framework, on student-centred learning and study results; also there is a change in the attitude from quality assurance towards the development of the teaching staff, also important is building and maintaining a strong institutional brand, and the perception of the teacher's image by students comes to the forefront. Researchers focus on students' academic performance, learning motivation and encourage students to think about the future of civilization, about a sustainable and unsustainable behaviour on a local and global scale, to use international summer schools, academic discussions and creative work-shops.

Currently, adult education is a diverse and mobile system of educational services. Given the current situation, adult education is designed to fill the list of missing competencies of a modern specialist, among which soft skills are important. Researchers have theoretically substantiated, developed and evaluated the communicative space of adult education lessons and developed guidelines for its modelling.

Several articles are about **music education** innovations specifically focusing on non-formal children education, paying specific attention to peculiarities of learning an instrument in a group; on innovations in study process of prospective music teachers; on students' perceptions about the use of background music in music lessons while performing written tasks, and on innovative methods for the development of interval hearing during the process of solfeggio lessons.

The several articles highlighted the importance of **language learning**. Transversal competences are fundamental in the 21st century and necessary for every higher educational institution graduate as they are prerequisites for well-being and success in life, adapting to the changeable and complex world and

meeting multiple demands of today's society, being competitive in the labour market, managing profitable business and developing an enterprise. The authors describe the process of developing such transversal competences as critical thinking, collaboration and creativity in case study-based professional English course in business administration studies; the development of adults' autonomous English learning experience in blended learning environment; implementing of communicative approach and a technological approach, and importance of peer collaboration in language studies.

One article is about attitude towards violence, criminal violence regarding with forensic psychology - "The Relationship between Implicit and Explicit Attitudes towards Criminal Violence and Attachment Styles". The aim of this study is to research the relationship between the results of implicit and explicit measurements of attitudes towards criminal violence and attachment styles of violent sentenced male offenders and non-offenders.

Articles covering conducted researches in the field of **using information technology in education and teaching mathematics** are about transformative digital learning in the context of higher education; the self-evaluation methodology of programmers' competitiveness in information technology organisations; entrepreneurial competence for competitive professional activity in the changing conditions of the modern labour market and professional environment of the industry for prospective engineers in food science.

The scientists clarified the concepts "professional competence of an engineer", this study demonstrates positive dynamics in the following indicators: projective and prognostic skills; organizational skills; information skills; analytical skills and efficiency of knowledge.

Some articles are about competencies-based education in secondary school, the researchers explain how to measure complex competence-based knowledge, skills and attitudes for developing mathematical competence and transversal skills such as collaboration, decision-making and self-discipline for pupils.

The articles in the second section **Education for getting competence** deal with situation in higher, school and adult education.

The papers related to investigations in **higher education** consider the relevance of the formation of professional competence of future specialists associated with the features of engineering activities of computer profile as well as the methodology for the use of mathematical modelling for the formation of methodological competence of the future teacher. The process of developing such transversal competences as critical thinking, collaboration and creativity in case study-based professional English course in business administration studies is analysed. The article from Lithuania reflects the experience accumulated while creating a new programme for emotional intelligence development based on the author's Method of Emotional Imitation, and discusses competences necessary for the developer and the teacher as well as challenges and problems encountered in the process of programme development.

The articles in **school education** comprise topical challenges in education in Latvia and they deal with: the theoretical analysis of innovations in the improved curriculum content of competence approach in Latvia; the role of technologies in the teaching and learning process of STEM in general comprehensive schools of Latvia as well as the investigation on promotion of the students' cultural understanding in general education by means of different curriculum designs and pedagogical approaches aimed at the development of learner's cultural understanding, and the analysis of their suitability for particular educational purposes in Latvia. The investigation of the diverse understandings of character and virtue education in Riga city, the capital of Latvia is reflected in the article from the University of Latvia. In the article from Czech Republic mapping the possibilities of outgoing international mobility in educational institutions and an exploratory survey to study the perception of international mobility by secondary school students are analysed.

Development of a constructive approach to mediation based on dialogue (discourse) and learning to create a dialogue is reflected in the article in the field of **adult education**.

Articles in third section on **education for sustainable development** describe the topics on sustainability in organizations, quality of education, pedagogical competences, ethnic identity, graceful aging, gender perception, children in kinship care and students' smoking.

Sustainable development is a civilizational strategy recognized by the world community, within the framework of which environmental impact does not go beyond the natural possibilities, written in the article *Competency-Based Approach to Educational Content for Sustainable Development in Latvia*. The transition to sustainable development is a complex and requires a change in the very foundations of social life. Education is essential in achieving sustainable development. The article contains practical suggestions to strengthen teachers' educational capacities for sustainable development.

The aim of the study *Formation of the Electronic Informational and Educational Environment in the Prospects of the University 4.0* of scientists from St. Petersburg is substantiate the need to create modern personnel competencies for the digital economy and create a new model of modern universities. Strengthening the role of the university, as one of the main producers of knowledge and competencies for the information society, dictates the need for it to implement both the functions of education and research, as well as the functions of transfer, commercialization of technology, and a provider of knowledge about the future.

The article *Pedagogical Competence of Aesthetic Cosmetologists for Sustainable Development* write about implementation of sustainability in organizations, emphasize large increase of innovative hardware technologies, more sophisticated procedures for skin care, what justifies an increasing need for highly qualified professionals in the Aesthetic Cosmetology industry who are able to perform these complex procedures professionally and educate their client awareness. Research show opinion of aesthetic cosmetologists regarding the need for pedagogical competence. In the field of healthcare, the Aesthetic cosmetologist holds a preventive role to minimize cases of skin sicknesses.

One of the main tasks of modern university professional education is to develop the sustainable mindset of future specialists. The development of a sustainable mindset within the study process can be achieved by combining professional competences with sustainability competences. The study refers to the quality assurance process at the university and reveals a sustainable way of thinking for future professionals in article "Discovering a Sustainable Mindset in Hospitality Educators".

The relationship between ethnic identity and sustainable development is not one dimensional. A person is viewed as a central focus of the sustainable development. The topicality of the study *Ethnic Identity and Sustainable Development* is determined by an interest to explore various manifestations of personality, and, in the study, by the ethnic aspect of identity. Researchers pay close attention to such aspects of ethnical identity as mother tongue, ethnic character, ethnic values, and ethnic culture.

Turkish scientists investigate certain views on the family life of the woman, the work life of the woman, whether the man was considered as the leader of the family, and whether these views had a relationship with gender in article "Gender Perception Towards Women in Rural Areas in Turkey". The majority of the men that took part in the survey think that the man is the family's leader and that men should make the most important decisions. An important part of the men think women are vulnerable and they should be protected.

The study investigated *Nutrition Education on Graceful Aging among Senior Secondary School Staff in Mushin Local Government Area of Lagos State, Nigeria*. The study revealed that majority of respondents agreed to the statement that nutritional education can promote graceful aging, teaches that over nutrition causes problem such as obesity. On the result of survey data, it was concluded that nutrition education plays a pivotal role in graceful aging.

The article *Challenges of Sustainable Development for Children in Kinship Care Families* accentuate the problems of children taken out of biological families and who can be placed in kinship care, foster families or in institutions. International and national political documents determine that placement close to family is a basic priority. Scientists identify resilience factors in kinship care families.

The aim of the study *Starting and Maintaining Smoking: A Qualitative Study of Tobacco Use in High School Students* is to investigate the motives for starting smoking, the factors that contribute to smoking initiation and how high school students become "regular smokers" from "trying" tobacco products.

Articles in fourth section on **design and craft** are about design thinking and craft entrepreneurship. To successfully train prospective product designers, authors have researched and described design thinking

strategies, what helps to plan business development. Design thinking is centred on the solution of the problem and creation of desirable outcome. Authors worked out design thinking concepts and stages, and opportunities of their implementation at university courses and school subject. Craft making is growing and regaining its position both: as hobby and business in Latvia. The craft entrepreneurs create different types of value ranging from materialistic to idealistic by nature and from economic to transformational by the impact: economic and regenerative on one end to symbolic and developmental on the other end of the continuum.

Articles in fifth section on **development of professional education and career** came from all over the world - researchers from 13 organizations in 7 countries had focused on researching the topic.

The result of the joint study by Latvian and Israeli scientists is the developed, adapted and practically approbated model for understanding the relationship between Organizational Learning Culture and Organizational Citizenship Behaviour. The proposed methodology can be used to assess the type of organization according to Organizational Learning Culture and classifying employees in relation to their organization to develop methods for improving the efficiency of the organization.

Two articles are devoted to the topic of supervision. One examining the learning motivation, involvement in the study process and formation of supervisor professional identity of prospective supervisors, in the other supervisors' opinion about supervisions of school career counsellors are explained. The researchers conclude that there is a need for greater promotion of supervision by the responsible authorities and to develop a longitudinal study to identify the internal (personal) and external factors that influence the awareness and formation of the supervisor's professional identity during the study process at the university.

Several articles focus on improving of students' career management skills and career guidance in general and vocational education (especially in work-based learning). Researchers conclude that in some vocational education programs, students experience the least career guidance activities that could have a negative impact on their career path. Also, the quality of the guidance received is not always sufficient, as the results show that only one-third of the students have established a dialogue with the career guidance stakeholders of secondary vocational education. The researchers conclude that career guidance in work-based learning will be useful if all stakeholders - students, group teachers, subject teachers, practice supervisors, career guidance professionals and employers - work together and offer a career guidance program that promotes collaboration. In a separate study, the importance of career guidance and the role of career counsellor is described and highlighted. Researchers conclude that a career counsellor must be competent at all fields of competences: career information, career education, career counselling, career service managing and she/he must also possess generic competencies.

One of the most popular topics is the role of the teacher in society. Researchers have found out the teacher's prestige in contemporary Czech society, have researched at what it looks like a professional handicraft teacher in the eyes of the student, and taking care of the further education of teachers, have evaluated the use of gamification as a means of consulting support for continuous professional development of teachers. The results of the study's lead to the conclusion that the prestige of teachers in society is not high enough, and one of possible reasons for lowering teachers' prestige may be their low remuneration, another reason is lower respect of teachers by students and their parents. The prestige of teachers is also linked to their ability to meet the expectations of students. According to the students, the task of the teacher is to create a free and reliable working environment that requires calmness, empathy, and instructional skills, students expect that teacher should be a friend and an equal partner who can be trusted to seek advice and discuss life problems. To help teachers develop their professional skills and protect them from burnout, gamification is presented as a form of consulting support of the process of teacher professional development directly at the workplace. Researchers recognize that the usage of experimental model simulation as a real phenomenon in pedagogical activity, creates optimal conditions and prerequisites for teacher's research competencies formation and helps to produce innovative solutions in problematic situations, which may arise in the teacher work.

Professional development and career management are important in all professions and work environments, including The Armed Forces. Health support for military personnel is a key stone for successful executing combat capacities of military personnel in time of military tasks realization. Researchers indicate problems of recruitment system for medical personnel that are lack of information

for target auditory (medical students) about recruitment procedure for military (medical) service and offer solutions to improve the situation.

Authors of the articles – professors, lecturers, teachers, master and doctoral students have made a significant scientific contribution in the preparation of these international proceedings and shared their experiences on topical issues of conference topics. Many thanks to the chiefs of all conference sections – B. Briede, R. Birzina, I. Kokle-Narbuta, I. Lice-Zikmane, Z. Beitere-Selegovska, J. Pavulens, L. Vigante-Simane and A. Vorobjovs – for organization and management of section effective work.

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