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У статті розглянуто європейські когнітивні практики розвитку соціальної згуртованості та перспективи їх імплементації в освітній простір України. Показано зв'язок соціальної згуртованості та трансверсальних компетенцій. У статті окреслено основні практичні завдання щодо імплементації європейських когнітивних практик в український освітній простір.

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EUROPEAN COGNITIVE PRACTICES OF SOCIAL COHESION DEVELOPMENT IN THE UKRANIAN EDUCATIONAL DIMENSION

he European Cohesion Policy is one of the answers to the challenges of the very fast changing modern society. Early in the human mankind's history there were some difficult periods when it was necessary to join each other for the surviving. Nowadays humans again need to change its adaptation strategies because of different cognitive and evolutionary niche. Internet of Things, Augmented and Virtual Reality, 3D manufacturing and Artificial Intelligense Socio-economical global crisis challenges for the new innovation approach in education and upper-education of the specialists in the future creative economics. First of all this is a challenge for the system of high education. The main task of modern high education (in particular) is to prepare new learners for the current global realities. The core problem is changing of cognitive niche of humans. Especially young people are living in informational, digital society, mostly in virtual reality. The social reality is

very non-stabile with the high level of uncertainty. So, there is the gap between social and "virtual" reality of social networks, digital reality of gamers, etc. Accordingly, it causes the gap between old and new generations. Therefore very actual is the problem of social cohesion development. All generations – "new" generation and "old" generation need higher order thinking, higher cognitive effectiveness. It's clear because of creative economy demands creative actors. Thus, it leads to the problem of proper changes and innovations in the educational system. Education policies and curricula aim to incorporate a broad range of skills and competencies necessary for learners to successfully navigate the changing global landscape. "Transversal competencies", sometimes referred to as "21st Century skills", are broad based skills that aim to meet these challenges, such as technological advances and intercultural communication. Education policies and curricula aim to incorporate a broad range of skills and competencies necessary for learners to successfully navigate the changing global landscape [5].

Stages of the problem development. Education and training are key factors in maintaining social cohesion and competitiveness in the European Union. Lisbon strategy fifth updated social EB confirms that education is one of the key elements of the European social model. But the modern problem of the separation of society due to the war (Ukraine) and waves of migrants (Europe) or displaced persons (Ukraine), requires go to another level of consideration of educational strategies focus on enhancing social cohesion. Educational cognitive practices are based on the using of the cognitive channels. Also they deeply involve students in interactive processes of teaching & learning for better results in education for better cohesion, teambuilding and social intellect training. From my point of view they are so effective because of connections with the most powerful mechanisms of human cognition – visual communications and mutual games. Mutual games to be considered as one of the most effective way to reach social cohesion in educational dimension.

Despite of complex problem of transfer and modification of cognitive practices into the virtual, on-line sphere, cognitive technologies and practices in education and training are key factors in the development of transversal competences as the base of the European educational policy. In general, the main goal of education is to adopt student to the success activities in the complex, non-stabile society (do not forget about challenges of the virtual and augmented realities). To date, no consensus has been reached for referring to non-academic skills, non-cognitive skills, 21st century skills, or transversal competencies, and this is reflected in the reports from the respective countries and economies. These competences are as follows: **Sense-Making, Social Intelligence, Adaptation thinking**: **Intercultural competences**, **Computational thinking, Transdisciplinarity, Design mentality, Cognitive load management**, **Virtual collaboration** [5]. In fact, almost all of them are important for the aims of social cohesion development.

The European educational policy oriented to develop these important and useful skills for the social cohesion development. Some of them are well-known but changed a little. So, strategic thinking is very important cognitive competence but it is transferred to the more complex and actual competence of **Sense-Making.** The integral parameters of successful interpersonal communications are base of the competence of **Social Intelligence**: the ability to connect with other people deeply and directly, to detect and stimulate the desired reactions and interactions. Socially intelligent employees know how to rapidly evaluate the emotions of people around them and adapt their words, tone and gestures. As a result, this is a key skill for working together and building relationships of trust, and it is necessary for getting along with groups of people in different contexts. This ability is very important for the social cohesion development processes.

In the behavior economics, managing cognitive patterns of social activities, there is very actual the competence of **Mastering the new media**: the ability to evaluate critically

and develop content that uses the new media forms, using those media for persuasive communication. The coming generation of workers will have to have fluent competences in differing formats such as video, be capable of "reading" and evaluating information critically, and communicating it through a number of different channels.

In the nearest future will be the most appropriate competence of **Virtual collaboration**: the ability to work productively, to enhance participation, and demonstrate a presence as a member of a virtual team now that ICT makes it easier than ever to work, share ideas and be productive in spite of physical separation [5]. This competence will help to develop the social cohesion of subjects of educational dimension despite of expansion of digital or augmented reality.

There is very important direction of the development of transversal competences – implementation of their forming into the educational processes. They all solve the problem of effective response to contemporary civilizational challenges of the knowledge society. In modern conditions higher education institutions no longer dominate in the production of knowledge, but they continue to play an important role in connecting knowledge and citizenship [1, p. 29]. Trends and challenges in integrating transversal competencies into education should be considered and applied in the Ukrainian educational dimension.

Unsolved parts of the problem. The problem of social cohesion is very close to integration processes. So, today there is a growing understanding of the need to promote the European integration and EU Studies more enthusiastically and broadly; as well as build networks with colleagues in Ukraine and abroad. Therefore, to create interest in the EU and constitutes the basis for future poles of European knowledge, particularly in the implementation of EU Social Cohesion Policy principles in Ukraine it is necessary to:

teach the EU issue students who do not study specifically on European issues,

hold a joint round-table for students from Ukraine and the EU that will enable Ukrainian students to clarify interest issues form people of their age and status living in the EU, because there is more confidence than the teacher.

To foster the introduction of a European Union angle into mainly non EU related studies in Ukrainian education system it is important to teach issues in EU subjects that are not related directly to the EU. Development of distance course will provide an opportunity to extend the knowledge of European studies of social cohesion to more students, especially those who work and want to get a second degree. Thus distance course will contribute to the development of interest in the study of the EU among a larger audience.

Goal of research. It is necessary to find methodological foundations for the teaching advanced courses on relevant aspects of European social cohesion studies and practices. It means that we are expected to form and deep our knowledge and understanding of the foundational theories, as such as: knowledge about principles and mechanisms of social cohesion, forming of European inclusive educational environment, methods of management in European corporations, skills of analyzing of EU's economics' and social problems, comparative analysis skill, transversal competences. The main task of dissemination of social cohesion policy principles is to promote discussion and reflection on EU issues, including understanding the concept of Europe and the nature of European integration, its fundamental principles, Ukrainian opportunities to implement the European experience via discussion, learning of theoretical materials and practical tools.

Problem research. Many organizations have taken an interest in the problems of social studies and civics education out of professional concern about the possible implications of interethnic and national tension. These organizations include the United Nations Development Program (UNDP), United Nations Educational, Scientific and Cultural Organization (UNESCO), the European Union, the Council of Europe, United Nations Children's Fund (UNICEF), the Soros Foundations, and many other orga-

nizations in the "third sector" of non-government activity.

Other well-known organizations in Europe have taken an interest in the problems of improvement of high education by implementing new approaches. For instance, National Learning and Work Institute (England and Wales) situated in UK is one of them. This is the one of the organizers of Festival of Learning. Festival of Learning is part-funded by the European Social Fund (ESF) to help promote ESF activities and successes in the field of educational policy support. The ESF is a European Union initiative that supports activities to extend employment opportunities and develop a skilled workforce. Established by the European Union, the European Social Fund helps local areas stimulate their economic development by investing in projects which will support innovation, businesses, skills development, job creation, social inclusion and local community regenerations. This is a sufficient financial support of high education because of investing over 2.5 billion in England in the 2014-2020 program to extend employment opportunities and develop a skilled workforce for students (www.festivaloflearning.org.uk/info/european-social-fund).

The recent project supported by EU in the frame of the Seventh Working Programme of Horizon 2020 – "Idea Garden". This is the project based on the motivation to better support creative practices and the goal to bridge the gap between traditional, often fuzzy, non-linear work practices and the available ICT infrastructure. The idea is to implement a creative learning environment which will consist of state of the art hard and software technologies that assist during all phases of the creative process (www.idea-garden.org). This is a response of educators to the demands of creative economics. It is very important to notice that the problem of new technologies in the system of high education is very actual because of increasing social problems worldwide. In particular, the problem of social cohesion and its educational background is very actual for Ukraine (not only). The soci-

ety should be a new and unprecedented challenge of responding to his own staggering complexity. The structure of our society needs to change. Around the world people are creating revolutionary movement against their governments. They do not want to live under the rules of government's dysfunction and corruption. People are trying to create a new world in which individual capabilities and the implementation is not detrimental to collective action.

In some places violence destabilize state power and social order. In others, mass dissatisfaction and frustration lead to unprecedented social movements. Unrest in rich and poor societies called deep and comprehensive frustration from a lack of something vital, for example, the food, the stalled, sustainable economic and other expectations. Local communities as one of the most predictable and effective tools on this matter to be developed during the program of decentralization (the core direction of reforms in Ukraine). To support this direction of reform and economy development should be change the educational dimension to enhance the social cohesion processes for better communities strengthening.

There is a very perspective approach in this direction – community based universities. One of the best practice is University of Brighton (www.brighton.ac.uk). From small beginnings in 1850s Brighton, the University of Brighton has grown to a complex and diverse institution based in three towns across the south coast of England. The ethos of this University is defined by four core values: inclusivity; sustainability; creativity; partnership. These core values help to keep the students to be a part of a dynamic, diverse and creative community that embraces partnership working and that makes a positive difference to society. Important to notice, that all these values are seemed to be very perspective not only to educational but societal development.

It is necessary to find methodological foundations for the implementation of new approach in the educational system. This approach should be based on the recent achievements of cognitive researches, neurosciences,

social\communicative educational technologies implementation, etc. It should be taken into the consideration that practical educational tools also need to be upgrade according to the recent innovations. This process should be based on the relevant aspects of European educational policy (including social cohesion and transversal competences studies). The main task is the dissemination of this direction of educational policy cognitive principles. Innovations in high education should be based on the latest scientific researches, approaches and technologies. Therefore the one of the most perspective direction is cognitive.

Cognitive practices in education based on multimodal learning, embodied cognition and interactive-learning framework. Cognitive practices are practical technologies of interactive communication (facilitation, mediation, active-learning based case studies, serious games, etc.). Implementation of educational cognitive practices has to take into consideration the basic cognitive mechanism. One of the major cognitive mechanism is the game – trough the game, as shows evolutionary epistemology, a person learns and develops. In addition, the game is one of the most emotionally deep, exciting process not only for children and young people but also for adults. This specificity of our cognitive system is successfully taken into account in "the experience economy", "economy of entertainment". The existing trend of development of social reality reflected in this area – "virtual offset": more and more games are transferred to virtual reality, and even in the space of social networks. The development of technology speeds up this process – right now there are gamers devices that combine the real physicality of the player with a virtual "avatar". Helmets for the other sensory experiences of reality are improving very quickly, along with a variety of devices that enhance our cognitive capabilities (for example, see or hear in the human range). But even without these devices a virtual game captures an increasing number of people. According to estimates of the Association of interactive computer programs back in 2006, they played about 146 million

people, representing 60% of the US population [3, p. 102]. Some modern cognitive practices, for instance, mediation also could be applying by approach called Serious Games. Serious Games are a recent evolution in training technology, bought about by the rise of gamification (the use of game theory and game mechanics such as points, leader boards, badges, progress bars etc., in non-game contexts to engage users). The main purpose of Serious Games is the development of the skills of the player, by retaining attention and engagement through immersive and entertaining media». Gamification is intensively spread in the education system. An important aspect of applying a particular category of games (including in education) is in focus of interests of the company Serious Games – the Serious Games Society (www.seriousgamessociety.org). Serious games are considered as a useful and effective tool for better learning, study, training, and evaluation in the education system. Application of serious games will help to implement cohesion strategies into the digital dimension of educational processes.

Nowadays the use of on-line training, stimulating has been increasing in all sectors of social activities. «From virtual reality to prepare surgeons for complex brain surgery, to airplane pilots being tested on simulators. Yet despite these advances, soft skills training like mediation, has been one of the last bastions of face-to-face only training. The reason for this of course is up until now the teaching of a process which is about human relationships always seemed impossible to deliver via technology» [4]. But now communicative cognitive practices could be transferred into the ICT sphere because of outstanding growth of its power and flexibility. However, with the trend toward on-line, interactive learning in all its forms increasing and the sophistication of the technology able to deliver many more nuanced approaches to learning. It concerns first of all the soft skills (facilitation, mediation, etc.) and how to transfer their art to professionals and practitioners. «We should seek to capture the spirit of mediation – which is also about innovation and flexibility – and

collaborate with on-line training organisations to develop content and approaches that will meet mediator trainee's needs while safeguarding the fundamental aspects of mediation and skills based training [4].

The results of the application of the above cognitive educational practices – new educational tools, new approach for subject education, methodological courses for supervision and upper-qualification of teachers (especially of high education schools). All of them will positively impact on creativity and social cohesion development of all subjects of educational sphere. But this way of learning is similar to instrumental learning and doesn't solve many actual communicative, psychological and social problems. They are seemed to be appeared nowadays and continued at least at the nearest future. So, it's necessary to implement into the educational system the different approach – more holistic and compatible with the actual social challenges. This is the transformative learning approach.

This approach based on the Transformative Learning Theory developed by Jack Mezirow of Columbia University. The history of this approach started in the 1970's, after researching factors related to the success, or lack of, of women's reentry to community college programs. His result was that a key factor was perspective transformation. He described a «10 phase transformation process and argued that transformations often follow some variation of the following phases of meaning becoming clarified:

A disorienting dilemma

A self-examination with feelings of guilt or shame

A critical assessment of epistemic, sociocultural, or psychic assumptions

Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change

Exploration of options for new roles, relationships, and actions

Planning a course of action

Acquisition of knowledge and skills for implementing one's plan

Provision trying of new roles

Building of competence and self-confidence in new roles and relationships.

A reintegration into one's life on the basis of conditions dictated by one's perspective» [2]

The first phase was a disorienting dilemma. The next two phases are important aspects of the second of the theory's themes – critical reflection. The next phase represents the third of the theory's themes, rational discourse. This is a very effective communication tools. The effectiveness lies on exploring with others the discovered "misfit" between your premises and your environment. And specifically it means that: - «Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change; - Exploration of options for new roles, relationships, and actions; - Doug's discussions with his group allowed him to explore this "misfit" how competition wasn't always the best approach to performance situations and explored other potential roles or approaches» [2]. This approach is very actual in «rainy days», which we are experiencing now. The modern society oriented on to the competitiveness and «success race» should be changed to the society of support and cohesion. Therefore this finding balance approach is really suitable for the transformation way. So, finalizing main principles of the transformational learning and the difference between instrumental and transformational learnings we can share the following suggestion:

«Instrumental learning is the acquisition of skills and knowledge (mastering tasks, problem solving, manipulating the environment: the "how" and the "what"). In contrast, transformative learning is perspective transformation, a paradigm shift, whereby we critically examine our prior interpretations and assumptions to form new meaning the "why." This perspective transformation is achieved through (1) disorienting dilemmas, (2) critical reflection, (3) rational dialogue, and (4) action» [2].

European cognitive practices in educational sphere seemed to be based both on the

transformative and, partially, instrumental learning. The basic innovations of the implementation of them into the Ukrainian educational dimension will be as follows:

elaboration of new courses in the field of the European social cohesion studies, including development of methodology and research techniques and teaching of a theoretical and practical material;

conducting of inter-university training which is expected to provide the possibility for students of different higher educational institutions and secondary schools to participate in studying of modules and research in the field of the European social cohesion studies;

elaboration of improvement of professional skill program for leaders of civil society and heads of public administrations that is a direct measure on maintenance of the lifelong learning development concerning the European integration processes and social cohesion studies;

teaching activity assumes acquaintance of wide audience with the newest information and communication technologies in frameworks of courses will be thought;

methodologically, the implementation of European cognitive practices into the Ukrainian educational dimension assumes a combination of various innovative modes of study within the limits of teaching of basic courses and trainings: simulation games, small-group tutorials, individual and group coaching, facilitation sessions – the above modern cognitive practices.

Conclusions and perspectives of further researches. New educational paradigm offers not only the concept of cognitive effectiveness but the social cohesion development and how to reach it through educational technologies. It includes topics of creative thinking, team-building abilities, effective decision-making, engagement in the learning and teaching processes, cognitive skills improvement, etc. The idea is implementation of European cognitive practices of social cohesion development in to the Ukrainian educational dimension. It will change the existing approach to the tea-

ching and learning in secondary schools and high institutions, in particular, pedagogical universities. Also there is very important focus on transversal competences and their development by the way of applying the cognitive technologies in education. Obviously it will improve the process of real European integration for Ukraine. First of all, it leads to the theoretical and practical implementation of European studies on the matters of educational policy, social cohesion ideas, European values, cognitive effectiveness, etc. To increase social and personal impact it is necessary to deliver tailor-made courses on European practices of social cohesion as new cognitive educational approach

REFERENCE

1. **Delanty G.** The University and Cosmopolitan citizenship / Gerard Delanty // HIGHER EDUCATION IN THE WORLD 3/ Higher Education: New Challenges and Emerging Roles for Human and Social Development. Global University Network for innovation. – N. Y., 2008. – 374 p.

2. Mezirow's Ten Phases of Transformative Learning. – The way of access: https://sites.google.com/site/transformativelearning/elements-of-the-theory-1

3. **Small G.** Brain on-line. Human in the Internet epoch / Gary Small, Gigi Vorgan, translated by B. Kozlovsky from the original (iBrain. Surviving the technological alternation of the modern mind, 2008) – M. : KoLibry, Azbuka-Atticus, 2011. – 353 p. – (Galileo).

4. **South J. A.** turning point for soft skills – The Mediation Simulator. – The way of access: https://www.cedr.com/articles/?item=A-turning-point-for-soft-skills-The-Mediation-Simulator

5. Ten transversal key competences [Online source] – The way of access: https://blog.jobfraternity.com/2015/07/20/ten-transversal-key-competences/