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Etyczne aspekty kształcenia przyszłych nauczycieli w zakresie edukacji włączającej

Streszczenie

Artykuł podkreśla szczególną wartość edukacji włączającej dla ludzkości, gdyż ma ona na celu tworzenie szkół, środowisk nauki, w których każdy, bez względu na charakter, zdolności, atrakcyjność fizyczną, zdrowie fizyczne, pochodzenie etniczne, religię, zamożność i status społeczny ma prawo do szczęśliwego życia oraz zaspokojenie własnych potrzeb poznawczych poprzez pozytywną interakcję z innymi. Skuteczna realizacja edukacji włączającej wymaga rozwiniętych emocjonalnie, moralnie i duchowo nauczycieli – liderów zmian. W artykule scharakteryzowano autorską koncepcję określenia sposobów „uduchowienia” systemów dydaktycznych kształcenia nauczycieli przygotowujących do pracy w edukacji włączającej. Łączy w sobie idee noosferycznej edukacji pedagogicznej, zasadę kordcentryzmu praktyk edukacyjnych, wirtualizację działań edukacyjnych i zapewnienie zrównoważonego autonomicznego spersonalizowanego rozwoju zawodowego.

Słowa kluczowe: edukacja włączająca, nauczyciele przygotowujący i doskonalący, wymiary duchowe, edukacja noosferyczna, kordcentryzm praktyk edukacyjnych, wirtualizacja działań edukacyjnych, autonomia uczenia się

Spiritual aspects of pre-service teachers training for inclusive education

Abstract

The article emphasizes the special value of inclusive education for humanity, as it aims to create schools, learning environments where everyone, regardless of character, abilities, physical attractiveness, physical health, ethnicity, religion, wealth and social status has the right to happy life and satisfaction of one's own cognitive needs through positive interaction with others. Effective implementation of inclusive education requires spiritually developed teachers – leaders of change. The author's concept of defining ways to spiritualize didactic systems of pre-service teachers training for inclusive education is characterized. It combines the ideas of noosphere pedagogical education, the principle of cord centrism of educational practices, virtualization of educational activities and ensuring sustainable autonomous personalized professional development.

Key words: inclusive education, pre- and in-service teachers, the spiritual dimensions, noosphere education, cord centrality in educational practices, virtualization of educational activities, learning autonomy.

Introduction

Dynamic changes in modern life caused by information technology transformations and the global pandemic, on a global scale intensified the reappraisal of values regarding the harmonious coexistence of mankind with nature, the humanization of interpersonal relationships, the determining role of positive spiritual and moral processes in any kind of social activity with a leading role of humanistic spiritually-oriented inclusive education.

The quality of inclusive education teaching practices can be ensured by spiritually mature for professional activities teachers who are ready to confront the threats of an unstable world and innovatively solve pedagogical problems for individual and collective merit. In this regard, it is important to give priority to the development of a holistic humanistic system of pre-service primary school teachers training.

Globally, large-scale work has been carried out on the identification and formation of functions and competencies of teachers in the XXI century, which is reflected in a number of UNESCO legal documents "Research in education and prospects for future learning: what pedagogy is needed for the XXI century" (2015)¹, UNESCO Future of Education Initiative (2019)², "Education in a post-COVID world: Nine ideas for public action" (2020)³. The results of research have shown that the determining factor of any educational process is the nature of the relationship between teachers and students. Thus, modern didactic systems should be aimed at developing future teachers' abilities for constructive pedagogical interaction, creative thinking, forecasting of further development of all participants of the educational process.

Taking into account that the main causes of pedagogical failures are the prevalence of rational-pragmatic determinants of educational practices efficiency evaluation and lack of understanding of deep content of pedagogical activities, we consider it relevant to design and implement didactic systems

¹ *Rethinking education* - UNESCO-UNEVOC (2015). <http://www.unevoc.unesco.org/e-forum>

² *UNESCO Futures of Education* - LEARNING TO BECOME (2019). <https://en.unesco.org/futures>

³ *Education in a post-COVID world: Nine ideas for public action*" (2020) <https://unesdoc.unesco.org/ark:/48223/pf0000373717/PDF/373717eng.pdf.multi>

for basic skills development of pre-service teachers in combination of pedagogical, psychological and philosophical knowledge about ways to spiritualize the educational process.

The driving force of scientific research has also been the proven belief that students of the XXI century and society expect from the pedagogical community, above all, the manifestation of high selfless teacher's love, which is expressed in benevolence, empathy, acceptance, ability to find constructive solutions for various problem situations.

In a recent study famous Polish scientist Joanna Glodkowska⁴ defined the main issues of educational changes aimed at building a comfortable school for everybody. The socially inclusive culture positive with understanding and respectful attitude to others is the background for such kind of school where inclusive education combines children with special educational needs and their peers in a common cognitive process. It is crucial to build schools where acceptance and respect constitute inalienable rights in order to ensure that different students can be present and participate in the joint process of teaching and learning. This complex educational model requires the convincing of all its subjects (students, parents, teachers, other specialists, and local communities) that differences have a significant educational and social value, and that they make our coexistence more meaningful»⁵.

The article objective is to identify the ways to spiritualize didactic systems of future inclusive education teachers' training.

The author's concept of defining ways to spiritualize didactic systems of pre-service teachers training with focus on inclusive education combines the ideas of noospheric pedagogical education, the principle of cordocentrism of educational practices, virtualization of educational activities and ensuring sustainable autonomous personalized professional development.

The noosphere approach to the implementation of pedagogical education

To characterize the noospheric approach to the implementation of pedagogical education, we clarify the essence of the concept of the noosphere in accordance with the views of the eminent scientist and philosopher Vladimir

⁴ J. Głodkowska, *A socially inclusive culture as a source of the model of educational changes from the perspective of teaching according to differences//Inclusive education: Unity in diversity!* Ed. Joanna Głodkowska. Wydawnictwo Akademii pedagogiki specjalnej, Warszawa 2020, p. 15-37.

⁵ Ibidem, p. 34.

Ivanovich Vernadsky (1863-1945). According to Vernadsky's original theory, the appearance of a man on Earth ushered a qualitatively new stage in the evolution of the planet, during which the biosphere would gradually transform into the realm of the Mind - the so-called "noosphere" (in Greek - mind, spirit), in which a man will become the main life-giving power. One of the key ideas underlying V. Vernadsky's theory of the noosphere is that a person is a part of the nature and it is obvious that the influence of the biosphere is reflected not only in the living environment, but also in the flow of human thoughts. But not only nature affects mankind, there is also a feedback. And it is not superficial, which would reflect only the physical impact of mankind on the environment, it is much deeper. V. Vernadsky saw the inevitability of the establishment of the noosphere, which was prepared by both the evolution of the biosphere and the historical development of mankind. He noted that the capabilities of a person with his mind and technology are so great that a person can interfere in the course of geological and chemical processes on Earth and even change their natural direction. Mankind must realize its power and role in the biosphere and then a new stage of its development will come. Scientific ideas and human activity have changed the structure of the biosphere, untouched nature is rapidly disappearing, new ecosystems and landscapes are emerging. With ingenious foresight V. Vernadsky foresaw the scientific and technological revolution of the XX century with all its consequences for the biosphere. V. Vernadsky believed that the Mind would rule the planet and transform it intelligently, prudently, without affecting nature and people. He believed in mankind and in good will. "Humanity cannot do everything it wants. It is limited in its actions, because human history is not a collection of cases. In its main features, it is natural and directed. In the geological history of the biosphere, man has a great future if he understands this and will not use his mind and his work for self-destruction"⁶.

Among the components of the noosphere there are the anthroposphere (cluster of people as organisms), technosphere (cluster of man-made objects and natural objects changed as a result of human activities) and sociosphere (cluster of social factors typical for this stage of society and its interaction with nature).

The growth of purposeful influence of people on the system man - society - nature occurs in accordance with the law of V. Vernadsky on the union of actions and ideas of mankind. The noosphere, ideally, is improved by the

⁶ V. Vernadsky, *Scientific thought as a planetary phenomenon*, Science 1991, p. 270.

joint efforts of people in the interests of both humanity as a whole and each individual.

The concept of the noosphere is useful for a better understanding of the process of personal development and should be decisive for the formation of a spiritually oriented education system.

The author's ideas of noosphere teacher education are based on the following structural basic components:

- Noosphere education is a personal and social value that humanity should master. Countries with a high level of noospheric education will be populated with happy people.

- Noosphere educated person is aware of the potential of own thoughts, emotions and feelings in the life processes occurring in the spiritual and material dimensions of the planet, understands essence of the relationship between the individual and the biosphere, society and space and directs own actions to preserve and develop life in infinite variety of its manifestations⁷.

The development of noosphere pedagogical education requires the delineation of the image of the ideal teacher. Highly spiritual individuals should come to schools of different levels to contribute to the spirituality of other people. The spirituality of the teacher is manifested through a worldview (values of life, love to children), the nature of thoughts, feelings, emotions; in action; in reflection on activities; in forecasting the future (desires, dreams, intentions). Sensual and emotional characteristics of the educational process are very important. V. Vernadsky highlighted the unity of the rational and the sensual in the process of cognition: "It is said that one mind can comprehend everything. Do not believe, do not believe! Those who have said so do not know what the mind is, they do not understand what excites about those works that are considered intellectual works. I imagine the mind and feelings in a tightly intertwined tangle: one thread is the mind, and the other is the feeling, and everywhere they touch each other"⁸.

The influence of emotions on the effectiveness of learning is evidenced by numerous studies, in particular conducted in 1928 by the famous physiologist I. Pavlov, scientific studies of human behavior show that the creation of positive associations with the learning process is more effective than cre-

⁷ M. Leshchenko, *Noosphere teacher education-strategic task of the present.*// Vernadsky's noosphere, modern education and science: a collective monograph, 2020. T.1, p. 352.

⁸ V. Vernadsky, *The beginning and eternity of life*, Soviet Russia 1989, p. 483.

ating negative⁹ Further research has shown that one way to create these effective associations is to stimulate positive emotions during learning, manifested in pleasure, enthusiasm and enjoyment at the moment¹⁰ While learning, positive emotions are associated with the acquisition of various skills that contribute to academic success.

Enhancing happiness in the classroom helps students maintain a sense of confidence, increases concentration and improves physical health (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008); Open hearts build lives: positive emotions, induced through loving-kindness meditation, build consequential personal resources. Performed research on the brain has shown that positive emotions are vital for effective learning; and learning styles that support positive emotions correlated with more effective cognitive information processing¹¹. Empirical research has shown that in a positive emotional environment students are more receptive to academic difficulties and enthusiastic about tasks solutions¹².

On the other hand, negative emotions marked by anxiety, anger, or resentment at a particular point in time affect memory and learning effectiveness¹³. However, negative emotions can sometimes contribute to achievement when frustration or failure motivates a student to work harder¹⁴, the experience of a enjoyment and uplifting mood in learning is more effective, especially for the educational process that takes place in an educational institution¹⁵. Although sometimes negative emotions can motivate a student to put in more effort, such dissatisfaction is more likely to lead to avoidance and social isolation¹⁶.

⁹ I. Pavlov, *Full collection of works in 6 volumes, published by the USSR Academy of Sciences*, Moscow 1952.

¹⁰ I.Seligman, M. Flourish, *A visionary new understanding of happiness and...* <https://psycnet.apa.org/record>

¹¹ Hinton, Miyamoto, & Della-Chiesa Brain Research, *Learning and Emotions: implications for education research, policy and practice ...* <https://onlinelibrary.wiley.com> >.

¹² Cohn, Fredrickson, Brown, Mikels, & Conway, *Happiness Unpacked: Positive Emotions ...* - NCBI - NIH <https://www.ncbi.nlm.nih.gov> >.).

¹³ McLeod & Fettes, *Trajectories of Failure: The Educational Careers of ...* - PubMed <https://pubmed>

¹⁴ Kannan & Miller, *The Positive Role of Negative Emotions: Fear, Anxiety.* <https://digitalcommons.sacredheart.edu> >)

¹⁵ Reschly, Huebner, Appleton, & Antaramian, *Engagement as flourishing: The contribution of positive ...* <https://onlinelibrary.wiley.com> >....

¹⁶ Elliot & Thrash, *Approach-avoidance motivation in personality: Approach and ...* <https://psycnet.apa.org/record>

Students who experience more positive emotions during the school day can demonstrate greater skills in overcoming learning difficulties. Studies show that experiencing positive emotions helps eliminate anxiety before testing¹⁷.

Research also shows that a higher level of positive emotions implies higher grades and improve math and reading skills¹⁸, as well as cognitive abilities and the level of excitement about cognitive processes of junior students. The study supports the idea that the creation of positive emotions in the classroom eliminates the fear of failure, underestimation of own abilities and other destabilizing factors. Dr. Reinhard Pekrun, Professor of Personality and Educational Psychology at the University of Munich wrote a book "Emotions and Learning"¹⁹, which was included in 2014 in the Series of Educational Practices, developed by the International Academy of Education (IAE) at UNESCO.

Based on the analysis of the results of numerous studies, the scientist claims "Emotions are contagious, and they can be transmitted so that the interaction partners feel the same emotions. Therefore, the emotions that the teacher experiences and discovers in the classroom can have a profound effect on the emotions that students experience. This applies to both positive emotions such as pleasure, excitement and pride during learning, and negative emotions such as anger, anxiety or frustration. The positive emotions of the teacher can contribute to the satisfaction of students from learning in the classroom and can have a lasting impact on the value of learning perceived by students". The scholar encourages teachers to "take care to identify the positive emotions they feel about teaching and the subject, and to make sure that they share positive emotions and enthusiasm with their students"²⁰.

Thus, scientists have established the influence of emotions experienced by the teacher on the general environment in which pedagogical interaction takes place. The mechanism of the teacher's influence on students' personalities is characterized by M. Leshchenko's theory of the cognitively active

¹⁷ D. Macher, M. Paechter I Papousek, K. Ruggeri, *Statistics anxiety, trait anxiety, learning behavior, and academic performance*, European Journal of Psychology of Education 2012, Vol. 27, no. 4 , pp. 483-498 <https://www.jstor.org/stable/43551094>).

¹⁸ S. Suldo, *The psychosocial functioning of high school ...* <https://onlinelibrary.wiley.com>

¹⁹ R. Pekrun, *Emotions and learning.*- International Academy of Learning. France 2014.

²⁰ Ibidem, p. 22.

field, which is based on Academician V. Vernadsky's concept of scientific thought as a planetary phenomenon of cosmic nature²¹.

Based on longstanding pedagogical experience, there has been developed a new approach to the quality of teacher's work assessment while the pedagogical interaction, which involved the assessment of the following factors:

- Sensual and emotional state of the teacher and students in the process of pedagogical interaction;
- Ways of personal interpretation of educational content by teachers and their influence on the perception of information by students;
- Ways of teachers' interaction with pupils concerning comprehension of the educational information and their influence on development of creativity of pupils which is demonstrated in personal self-expression during the learning process;
- Sensual and emotional reactions of students in relation to the acquired educational experience, the depth of knowledge acquired by students;
- Reflection of the teacher in relation to the implemented pedagogical interaction; analysis of his emotional state, further plans.

The nature of pedagogical interaction is the imposition of separate personal energy fields of teachers and students, resulting in a total space of educational activity. The field category is based on V. Vernadsky's statement that each individual is characterized by "the field of his own existence", and energy and material exchange between living organisms is carried out through the field of life - both in the environment of gravity and in the microscopic section, where gravity force is not the dominant one..." (Vernadsky, 1989). Thus, pedagogical interaction is characterized by a total energetic field, which is manifested in the feelings and emotions experienced by participants of the learning process.

The field of each individual is characterized by the integration of "sensual and rational, subconscious and conscious, hedonistic and heuristic and is manifested in people's attitudes to the world, as well as in phenomena that are not subject to standard logical understanding: emotions, feelings, experiences, intuitive predictions, non-standard inspiration, dreams, hallucinations".

The field of an individual is in constant interaction with the fields of others. The total field that arises during pedagogical interaction is called cognitive-active, because it affects the effectiveness of educational activities. In

²¹ M.P. Leshchenko, *Happiness of the child-the only real happiness on Earth: To the problem of pedagogical skills*. -Kyiv-Poltava, Printing House, "Techservice" 2003, p. 304.

relation to feelings and emotions that arise and are dominant during pedagogical interaction, the concept of positive or negative potentials is introduced. Depending on the feelings of all participants in the pedagogical process – positive (enjoyment, inspiration, creative success, encouragement, love) or negative (fear, humiliation, violence, inability, helplessness), we determine the energetic potential of the field - positive or negative.

The tension of feelings determines the force characteristic of the field, and the qualitative nature of the interaction identifies the potential of the field positive or negative. If the teacher instills strict discipline through humiliation, violence against students, as with a kind intention, a negative cognitive-active field is formed, which is manifested in negative feelings of teachers to students, students to teachers, to the lesson, to learning in general. Therefore, frankly heartless, actions of the teacher spread callousness and cruelty and are manifestations of the old pedagogical thinking.

In the context of our study, it is especially important to say that the influence of the teacher's field, professionally formed personality, is crucial for the total (teacher and students) cognitive-active field, as well as for the sources of creation of the active cognitive field. First, the teacher creates an image of educational information, the core of which is abstract scientific generalizations. The image of educational information has personal and subjective characteristics that cause various emotional states. The characteristics of the educational content image depend on the level of imagination and creativity. The information image can be vividly attractive to students, and it is possible that the poor information image creates boredom and negative emotions, and the consequence is the reluctance of students to learn this material. We emphasize that the pedagogical excellence of the teacher is manifested in the ability to produce vivid images of educational information.

The next important point is the ways of pedagogical interaction that stimulates the studying. The art of words, dramatic play, music, choreography have great potential in terms of the possibility of learning educational concepts, categories, the formation of skills and abilities. Various types of creative expression contribute to comprehensive research, turn learning into a game of thoughts and feelings, accompanied by a powerful burst of positive emotions ²².

²² M. Leshchenko, L. Tymchuk, L. Tokaruk, *Digital narratives in training inclusive education professionals in Ukraine, Inclusive education, Unity in diversity* / Ed. Joanna Głodkowska. Wydawnictwo Akademii pedagogiki specjalnej, Warszawa, 2020, p. 254-270.

It is worth mentioning the statements about the expediency of creating didactic game realities on the basis of information images, which are characterized by a huge educational and developmental potential, deserve special attention. In the process of creating and strengthening the didactic game reality, information and communication technologies play a significant role, complementing the arsenal of pedagogical tools of teachers.

If the teacher manages to create a cognitively active field of maximum positive potential, it appears "in a special atmosphere of teachers' and students' creativity, when everyone is overwhelmed by feelings of admiration, joy of discovery and comprehension of previously unknown phenomena." .

The experience of creating a cognitively active field of positive potential in the practical activities stimulates the desire to continue creative work, demonstrates the presence of inspiration, lack of fear of difficulties, faith in the mission and the importance of pedagogical work. Pre-serviced teachers should be taught how to create interesting images of educational content and ways of its creative comprehension by students, consciously stimulating the emergence of positive feelings and emotions that form the core of the personality.

Every person, every teacher has his own noosphere, in which the "determining factor is the spiritual life of a personality, in its special manifestation of thoughts, feelings and worldviews". During the educational process a common noosphere of pedagogical interaction is created. The nature of the noosphere created by the participants of pedagogical interaction is determined by the potential of the field that arises as a result of the imposition of individual fields.

For inclusive learning, it is important that the teacher is educated in no-sphere manner and is aware of the potential of own thoughts, emotions and feelings in various educational practices. It is also important for educators to understand the essence of the relationship between a teacher and students, the biosphere, society and to direct the actions to preserve and develop life in infinite diversity of physical, mental manifestations of all participants of the learning process.

The noosphere approach substantiates the didactic system of pre-service teachers training for inclusive education as an orderly space for the implementation of pedagogical interaction, in which the nature of thinking, feelings and actions of participants in the learning process determines its spiritual potential. The processes that take place in the educational reality have a profound effect on the development of constructive communication skills, basic professional skills, as well as the near and distant future of all partici-

pants in the learning process. The application of the noosphere approach is crucial in the development of students' ability to create a cognitively active field of positive potential, as it aims to direct the thoughts and feelings of future teachers in a positive and constructive direction.

The principle of cordocentrism in educational practices

The training of noospherically educated teachers is based on the principle of cordocentrism of educational practices, which determines the dominance of spiritual values in the process of harmonious combination of scientific and emotional, logical and intuitive, general and personal elements, which positively effect all participants in pedagogical interaction. The principle of cordocentrism is defined on the basis of integrating the results of philosophical, psychological and pedagogical concepts and research, and its implementation requires a transformation of pedagogical thinking.

Surveys such as that conducted by Australian scientists Eileen Willisa have disclosed the essence of "pedagogy of the heart"²³. She had studied approaches to the pedagogy of the heart, which involves the development of imagination, activation of spiritual processes, learning to communicate and manage emotions. Researchers substantiate the concept of "trained heart" with the help of phenomenology (descriptive psychology, which studies the content of emotional experiences in their internal manifestation and determines their characteristics), philosophy, sociology, theory of education and psychology.

The "trained heart" characterizes a way of perceiving the world in which the environment and the people with whom communication takes place acquire special significance and value, in which the meaning of life is expressed. The heart calls for the performance of certain duties, and their neglect causes remorse. A person with a trained heart does not limit thinking to a rational-instrumental function, and is capable of spiritual and ideological thinking, in which the values of human existence and answers to questions in relation to the current mission. Students with the learned heart find the values in love, benevolence, charity and creative work. Australian scientists insist that in the professional education of teachers, the education of the heart should take a worthy place, because its implementation creates the conditions for self-knowledge and study of the correctness of the profes-

²³ E. Willisa, T. Leimanb , *In defense of a pedagogy of the heart: theory and practice in the use of imaginal knowledge Higher Education Research and Development* 2013/32 (4). DOI: 10.1080 / 07294360.2012.706747).

sional choice. According to scientists, personal stories - narratives, which reveal an open and unbiased view of experience, its rich emotional and emotional nuances - help to open the heart to yourself and ask if you can perform functions in accordance with values.

It is noteworthy that the education of the heart as a category to describe the spiritual development of the individual, was used by prominent Ukrainian director Oleksandr Dovzhenko in cases where he warned against the expansion of specialists with higher education and the dominance of one-dimensional rational-instrumental thinking.

It is significant that the issues of spiritual development of the future teacher are realized in an integrated educational reality that combines scientific, artistic and spiritual-religious approaches to knowledge of the world.

A prominent spiritual personality, Nobel Laureate, the Dalai Lama²⁴ initiated an international group of leading educators and scholars to discuss and develop strategies for the future of education in Dharamsala, India, at the Tibet Central Administration House. The 200 invited guests were joined by 2.5 million participants via the Internet, who had access to a live broadcast conducted in English and simultaneously translated into Tibetan, Chinese and Russian.

The discussion was focused on ways how to prepare young people not only to master the academic knowledge and skills they need to succeed as workers in the global economy, but also the development of socio-emotional, ethical and practical skills needed to thrive in today's complex world.

The spiritual guidelines of the meetings were the statements of the Dalai Lama on the expediency of educating the heart on the basis of universal values and secular ethics, presented in the treatise "Outside of Religion". Here is the content of the basic statements:

The 21st century must be a century of dialogue, but for that to happen, humanity today needs to lay the foundation for the future. And the hope lies in the education of new generations who will inherit the opportunities and challenges of our century. Today's youth must make the world a better place than the one they were commanded to do. A lot falls on their shoulders.

Just as we take for granted the need to acquire knowledge in basic subjects, I hope that the time will come when we take it for granted that children in their school curriculum will perceive the intrinsic values such as love, compassion, justice and forgiveness.

²⁴ *Education of the Heart* - Mind & Life Digital Dialogue. Mind & Life Conference 2018.

If children have the skills needed to respond appropriately and wisely to challenges such as environmental degradation and social inequality, they need to be prepared to respond to those challenges. I hope and wish that one day formal education will pay attention to what I call “the education of the heart”²⁵.

The education of the heart promotes the idea that the adaptation of age-old wisdom is needed in modern educational institutions if educational leaders want to adequately respond to the challenges facing humanity as a whole species and the whole planet. The values of the education of the heart are the development of attention (eg, attention awareness), socio-emotional abilities (eg, empathy, perspective, kindness), systems thinking skills (eg, vision of interdependence, our common humanity) and ethics (eg, justice, compassion). through specific practices (eg, focused attention) and activities (eg, help with reflection).

Such education will prepare young people to succeed not only as workers in the world economy, but also as active citizens who want to be forces for good - working towards the prosperity of the individual and the team in the face of serious global challenges: economic inequality, social division and climate change. The education of the heart demonstrates a new generation of creative programs aimed at cultivating human potential for prosperity, emphasizing the importance of taking into account the broader cultural and educational context in which such programs and practices are implemented.

The organizational culture and pedagogical practice of many school systems are inconsistent with the intentions and goals of such programs. Very often, such systems emphasize rational values such as competitiveness and material reward, and identify economic goals such as employment, greater mobility and economic prosperity that are central to the learning process.

Without such an approach to teaching and learning, where cultural significance and development, curiosity and interest are central, there is no any enrichment program that can help children learn and prosper. Students should be active participants and co-authors of the learning situation with adults to develop the ability for continuous development and learning. Such an approach to a broader revision of education requires a systematic view and rethinking of the very goals and practices of teaching and learning on a broader and deeper scale.

The implementation of learning based on the concept of the education of the heart contributes to the expression and realization of the cognitive needs

²⁵ Dalai Lama, *Beyond Religion: Ethics For A Whole World*, Mariner Books, 2012.

of the individual, which is closely related to the process of personal development and the study of what it means to live well and meaningfully.

The human prosperity should be at the center of primary, secondary and higher education systems worldwide. This emphasizes the importance of focusing on the social context and systems in which such programs are implemented, as well as supporting the development of educational leaders, teachers and students who implement research and practice on "Education of the heart- the movement into the future".

In times of growing differences and exacerbating global challenges, such transformational approaches offer hope and practical tools to prepare a new generation of young people to perceive and realize our shared humanity.

The time has come, as the Dalai Lama rightly argues, when "seven billion people must learn to live as one small community." It encourages all of us to extend our empathy beyond ourselves and our own families (e.g., basic care and compassion) and even our own nations and religions (e.g., social care and compassion) to humanity as a whole (e.g., global care and compassion). Education plays an important role in educating personal care and responsibility, social care and responsibility, as well as general care and responsibility for the well-being of others²⁶.

Thus, to prepare future teachers for inclusive education, it is vital to implement the principle of cordocentrism, as students need to be taught to see in an inclusive classroom a single family, where everyone has the right to happiness. The words of the prominent Ukrainian pedagogue V. Sukhomlinskyi (1976) are of great importance: "There are hardly any other professions, except the professions of a teacher and a doctor, that would require so much cordiality. . You may not only have forty students, if you teach in high school, you will have one hundred to one hundred and fifty students. And everyone needs to be given a piece of their heart, for the joys and sorrows of everyone needs to find a place in their heart"²⁷.

To implement the principle of cordocentrism in the teaching of future teachers, it is necessary to apply methods and techniques of teaching related to the activation of the emotional sphere, the experience of students, the development of their imagination and attention. Such methods of teaching include ways of interaction between teacher and students, which activate different types of virtuality in the learning process.

²⁶ Ibidem.

²⁷ V. Sukhomlinsky, *One hundred tips for teachers* Soviet School Publishing House, 1976 p. 654.

Virtuality in the educational process

The category of virtuality is multifunctional and polysemantic, and the development of ideas about virtuality originates from the views of ancient philosophers and continues to develop in modern times. The word "virtual" is of Latin origin "virtualis", and means "possible", "imaginary". We will distinguish between natural, artistic and digital virtuality.

The source of natural virtuality is the spiritual and mental activity of a person. Natural virtuality is a sphere of his spiritual and mental activity which is realized in dreams, fantasies, memories, games, dreams. Imagination is defined as "the ability to create images, form new ideas or concepts in natural virtual reality. Activation of the imagination generates virtual worlds that embrace the human psyche like a dream. During dreams, fantasies, virtual reality is more, but not fully amenable to volitional control. A person consciously forms in the imagination the situation of the desired event, creates characters, builds a sequence of actions and situations, actually acts as a director and actor of the created virtual action. Verbal manifestations of natural virtuality are narratives in which a person tries to tell about what he has seen and experienced in virtual worlds. Games are also characterized by natural virtuality, the participants of which turn into virtual characters and act in the conditional space of the game as in real life.

Artistic virtuality is manifested during the creation of works of art and also during their perception. The creation of works of art is accompanied by the tension of the imagination and the realization of artistic images with the help of various art techniques. The whole figurative-symbolic world created by art can be interpreted as a kind of space of virtual realities, each of which is unique and is realized in the course of aesthetic perception of a particular work of art by a particular recipient. The specificity of artistic virtual reality lies in the conscious participation of the recipient, and often there is a higher level of experiences and emotions than in ordinary human activity, and most importantly - the aesthetic pleasure that a person feels throughout the perception of this reality.

Digital virtuality includes all forms and elements of virtuality that are consciously created using modern digital technologies and computer technology. Digital virtuality manifests itself in the following three areas:

- a) inclusion of elements of virtual reality in the most relevant types of art (computer special effects in movies, video installations);
- b) creation on the basis of elements of virtual reality of artifacts of mass culture and applied products (computer games, video-computer attractions, laser-electronic shows, computer simulators, etc.);

c) the emergence of art practices in the network that broadcast and adapt to the Internet traditional art practices (digital narratives, online literature, virtual exhibitions, museums, travel, etc.), and the emergence of fundamentally new network art projects (network art, network environment, etc.).

Digital virtuality retains a sense of the conditional boundary between the recipient and the artifact, thus, full immersion in virtual reality does not occur.

In the process of training future teachers, as a rule, all three types of virtualization and their combinations are used. Teacher training methods that activate different types of virtuality in the educational process are defined as methods of transforming educational content and educational activities.

The design of methods for transforming educational content is based on a binary-opposition approach (paired combination of concepts, definite properties or features that have the opposite meaning) and is based on the integration of rational and sensory, logical and emotional, real and imaginary, spiritual and material. As a result of transformational changes, educational content acquires narrative features and is expressed in scripts and stories, games, including the elements of fantasy, namely: cognitive-detective investigations; virtual travel.

A striking example of the transformation of educational and moral-educational content into a fabulous form attractive to children is "School fairy tales under the blue sky" by V. Sukhomlynsky²⁸. The ability to transform educational content is formed on the basis of the methods of Propp²⁹, Gianni Rodari³⁰, pedagogical technologies of didactic art games by N. Sulaeva³¹, teaching and education by a fairy tale, digital narrative and others.

Methods of transforming educational content include:

- narrative transformation – presenting the educational content in the form of emotionally-colored, intriguing story, which skillfully combines scientific facts and artistic interpretations of the studied concepts, fantastic, fairy-tale elements, biographical and autobiographical narratives;

²⁸ V. Sukhomlynsky, *School fairy tales under the blue sky*. Kyiv: Soviet School Publishing House 1991, p. 192.

²⁹ V. Propp, *Morphology of a fairy tale*, Moscow: Soviet School Publishing House 1969.

³⁰ J. Rodari, *The Grammar of Fantasy: Introduction to the Art of Inventing Stories*. Teachers & Writers Collaborative 1996, 2nd edition, p.164

³¹ N. Sulaeva, *Preparation of future primary school teachers for the use of didactic art games in the educational process*. PhD dissertation, Institute of Pedagogy and Psychology of Vocational Education of the Academy of Pedagogical Sciences of Ukraine 2020.

- adventure content transformation - structuring and virtualization of educational information messages in scenarios of different types of adventures (in the world of mathematical, natural, artistic, anthropological knowledge; during imaginary temporal and spatial movements to stay in distant epochs and imaginary stay in geographically remote places, communication with people who lived in different epochs, in the process of spiritualization of characters and communication with them in science fiction, books, film, television, Internet worlds);

- professionally-oriented transformation of content - modeling of scientific, professional activity on the basis of a game plot related to solving problems of mono-disciplinary, interdisciplinary nature by activating cognitive interests and their design in the intervals of present and future life.

Methods of transforming educational activities provide the transfer of participants of the learning process in virtual worlds created by narrative strategies, various arts, digital technologies and modeling of pedagogical situations that stimulate interest and provide in-depth knowledge of the chosen topic.

Methods of transforming educational activities include:

- methods of natural virtualization of educational activity (activation of experience, memories, imagination, narratives, creation of cognitively active field of pedagogical interaction by words and actions, activation of memories of own educational experience, narrativization of internal state of personality, reflection, self-reflection, self-evaluation, creation of images of scientific and creative activity, fantasizing about the professional future, self-training.);

- methods of artistic and game virtualization of educational activities (different types of dramatization: verbal-pantomime reproduction, rhythmic reproduction, staging, improvisational dramatization; reality game, creative writing, poetry, singing, music, choreographic expression, rhythmic word games, artistic techniques, art ;

- methods of digital virtualization of educational activities (use of digital media, computer games, computer graphics, computer music, blogs, sites, created augmented reality).

Psychologists, on the basis of numerous experimental studies, consider the heterogeneity of consciousness, which includes a number of other, less "everyday" realities. There are so-called trans real transitions - complete, "when the new reality acquires a complete ontological status," or incomplete. The ability to make such transitions, to combine realities is a necessary element of the processes of socialization, personal development in

modern society. In this regard, there is an urgent need to study virtual phenomena, to study the possibilities of their use in creating an effective learning environment, pedagogical reality.

The development of imagination and fantasy of future teachers. can activate the cognitive activity. It is worth remembering that L. Vygotsky paid considerable attention to the development of imagination and the art of creating artistic images: there is "a huge force that ignites the senses, excites the will, increases the energy that determines and prepares for action." The eminent psychologist rightly believed that by involving the individual in the figurative world, we do not harm his intellectual development, but on the contrary, promote it, because a person has a desire to create an imaginary world in order to adopt to the laws governing the real world³².

An important aspect of substantiating the principle of virtualization of educational activities is the concept of imaginative education of Canadian scientist Kieran Egan³³, who drew the attention of the pedagogical community to the relevance of ideas about the development of imagination in educational activities. The publication of Kiran Egan's books and his lectures and seminars in Canada, the United States, Ireland, Portugal, Greece, Sweden, and Australia contributed to the concept of figurative education. The uniqueness of K. Ergan's (2005) approach lies in the combination of the development of imagination, emotions and cognitive skills. Based on the description of specific situations, the scientist clearly showed how knowledge comes to life in the minds of students if it is introduced in the context of human hopes, fears and passions. The scientist considered narratives as a powerful tool and outlined practical ways of their realization in educational practices. For practical realization he developed numerous samples of carrying out lessons, formulated bases of designing of figurative training.

Defining imagination as "the ability to think about the possible," the scientist wrote that "imagination is certainly one of the features of our mind that has allowed us to do things that are different from how it was done in the past, or make us feel that we are not limited by past, current conditions".

³² L. Vygotsky, *Imagination and creativity in childhood*. SPb.: SOYUZ 1997, 96 p.

³³ K. Egan, *An Imaginative Approach to Teaching*. Jossey-Bass, 2005, p. 274.

Of particular importance for our study is the approach developed by Professor M. Leshchenko (2020)³⁴ to the interpretation of pedagogical skills as the ability to create pedagogical reality, which should be characterized by active creative work of imagination, fantasy, positive emotional background and at the same time create conditions for practical constructive action, critical thinking and the circumstances of life in terms of their harmonization with the needs of the individual. The scientist emphasizes that the obligatory characteristic of pedagogical reality is its virtuality, which enables the teacher and students to perform real actions for imaginary movement into the created virtual space and perform in it those activities that are not available for real space. pedagogical reality is impossible without the activation of all types of virtuality (natural, artistic, digital).

In our opinion, if all kinds of virtuality are combined in pedagogical reality, then there will be an integrated virtual pedagogical reality, which is subject to the wishes of participants in the learning process and gives a sense of authenticity of experience gained in other than real life.

Integrated virtual pedagogical reality is interpreted as a product of creative activity of teachers and students. It is a complex self-organizing system, learning environment created by activating imagination and fantasy, different types of their creative expression and digital technologies, and specifically perceived and reflected in the psyche learning process, active in this environment, as close as possible to reality.

We emphasize that the integrated virtual pedagogical reality provides a qualitatively new educational experience. Its specificity is that the teacher and students actually live and act in a virtual environment according to special rules of the game. In fact, integrated virtual pedagogical reality becomes for teachers and students of the XXI century a special quasi-spiritual environment in which they learn, feeling themselves as spiritual and material beings in the world of multiple realities.

An important aspect of preparing future teachers for inclusive education is the implementation of an individual approach aimed at autonomous learning activities. We interpret personalization as a process of taking into account the individual characteristics and educational needs of students by specifying and self-determining the tasks, content, forms, methods and means of educational activities during its design, implementation and evalu-

³⁴ M. Leshchenko, *Noosphere teacher education-strategic task of the present*. In Samodrin (eds), *Vernadsky's noosphere, modern education and science: a collective monograph.*: PE Shcherbatykh OV, T.1, Kyiv-Kremenchuk 2020, p. 254-291.

ation. We consider independent work as the least effective form of personalized learning, because during its implementation teachers regulate tasks, content, learning strategies, and signs of personalization can be found only in the temporal and spatial parameters of educational tasks. Autonomy is the highest form of personalization and it involves a completely independent study of educational content³⁵. The process of autonomous personalized learning is a dynamic, holistic subject-subject interaction aimed at developing students' learning and self-improvement skills according to personal cognitive needs. The category of autonomous personalized learning reflects the deepening of the meaning of the concept of individualization by integrating the autonomous actions of the student in all components of educational activities. The introduction of this category was carried out in order to promote the development of personalized learning to increase the efficiency of educational activities.

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Autonomous personalized learning

In the conditions of higher educational institutions it is important to introduce elements of autonomous personalization into the educational process for harmonization and complementarity of educational tasks that meet

³⁵ Y. Lavrysh, *Personalized learning of foreign languages for students of engineering in a digital society: didactic aspect*, Kyiv 2020, Centre of educational literature, p. 352.

the requirements of state professional standards and personal educational needs of students.

Autonomous personalized learning provides an improvement in the quality of pedagogical education, which is manifested not only in improving the academic performance of students, but also in the development of self-regulation, self-reflection, self-assessment, self-knowledge, and the ability to learn throughout life.

Conclusions

Inclusive education is of particular value to humanity, as it aims at creation of schools, learning environments where everyone, regardless of character, abilities, physical attractiveness, physical health, ethnicity, religion, wealth and social status, is aware of their own uniqueness. and the uniqueness of others, has the right to a happy life and satisfaction of their own cognitive needs through positive interaction with others. The implementation of inclusive education should have a positive impact on the development of civilization. The effective implementation of inclusive education requires spiritually developed teachers - leaders of change.

Thus, the spiritual dimensions of the preparation of pre-service primary school teachers for inclusive education should be provided:

- development of noosphere education of students (awareness of the potential of their own thoughts, emotions and feelings in educational processes, understanding the essence of the relationship between the individual and the biosphere and society, directing their actions to preserve and develop life in its diversity);
- implementation of cord-centered education;
- using methods of activating different types of virtualization of educational content and educational activities;
- focus on learning autonomy.

Teacher training for inclusive education should be aimed at developing spiritual values and integrate the knowledge of spirituality, the biosphere, the social environment and their interrelationships. If we want to improve education, we need to make efforts to spiritualize the content and learning process of pre and in-service teachers.

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