

Formation of New Approaches to the Use of Information Technology and Search For Innovative Methods of Training Specialists within the Pan-European Educational Space

Tetiana Stratan-Artyshkova¹, Khrystyna Kozak², Olena Syrotina³, Nataliya Lisnevskaya⁴, Svitlana Sichkar⁵, Oleksandr Pertsov⁶, Oleksandr Kuchai⁷

¹ Doctor of Pedagogical Sciences, Professor, Department of Art Education, Volodymyr Vynnychenko Central Ukrainian State Pedagogical University, Ukraine

² Candidate of Pedagogical Sciences, Head, Nursing Department, Teacher of Clinical Disciplines, Chortkiv Medical Vocational College, Ukraine

³ PhD in Pedagogical Sciences, Senior Lecturer, Department of Romance and Germanic Languages and Translation, National University of Life and Environmental Sciences of Ukraine, Ukraine

⁴ Candidate of Pedagogical Sciences, Senior Lecturer, Department of Theory and Methodology of Preschool Education, Olexander Dovzhenko Glukhiv National Pedagogical University, Ukraine

⁵ Candidate of Philological Sciences. Associate Professor, Department of Applied Linguistics and Journalism, Pavlo Tychyna Uman State Pedagogical University, Ukraine

⁶ Candidate of Pedagogical Sciences, Senior Lecturer, Department of Pedagogy and Special Education, Volodymyr Vynnychenko Central Ukrainian State Pedagogical University, Ukraine

⁷ Doctor of Pedagogical Sciences, Professor, Department of Pedagogy, National University of Life and Environmental Sciences of Ukraine, Ukraine

Summary

European integration processes have acted as a catalyst for the emergence of a new type of educational environment, which is characterized by competent flexibility of specialists. Therefore, the article focuses on professional training of teachers in the context of European integration processes using information technology and the search for innovative methods of training specialists. One of the educational priorities in Europe is to create a new model of a teacher who has an academic education, knows innovative methods, is able to perform functions and tasks efficiently and professionally, adequately, quickly and correctly respond to changes and innovations. The tasks facing education in the European dimension are formulated. The main trends in the education of teachers in modern Europe are described: the need to deepen and expand subject training programs in pedagogical institutions of Higher Education, which will allow autonomy of activity, awareness of responsibility for independent creative decisions, create favorable conditions for the development of professionalism through the use of Information Technology and the search for innovative methods of training specialists. At the present stage, various models of teacher training are being developed based on the University and practical concept using information technology and searching for innovative methods of training specialists. On this basis, two different theories of perception of teacher education were formed: as preparation of teachers for work throughout their professional career; as preparation for the first years of professional work, which is periodically repeated in the process of continuous professional training and improvement. Among the advantages that the use of Information Technology and the search for innovative methods of training specialists to implement the learning process, it is worth

mentioning the following: simultaneous use of several channels of perception of the student or student in the learning process, thanks to which the integration of information processed by different sensory organs is achieved; the ability to simulate complex real experiments; visualization of abstract information by dynamic representation of processes, etc.

Keywords:

new approaches, use of information technology, innovative methods, training of specialists, pan-European educational space, professional career.

1. Introduction

Effective functioning of the modern education system is impossible without high-quality information support, the content and nature of which are regulated by the purpose of the educational process, the direction of future professional activity of students, the subject, means and results of training. One of the possible ways to improve the effectiveness of the learning process is to unify and combine tools and technologies into the information educational environment of an educational institution.

The formation of future specialists for various branches of professional activity involves an active study of the category of readiness of a professionally trained specialist, which is also considered as a theoretical problem [8]. One of the priority areas in the field of informatization of education is the development and implementation of new

approaches and innovative methods of training specialists, multimedia products in the educational process.

Nowadays, education in Ukraine has undergone socio-political and economic changes, but at the same time there is no clear focus on the personal and professional development of future teachers in education. The educational system has a pronounced authoritarian character, there is little rationalism and activity in it. But the training focuses on memorizing the material, rather than finding new ones. This style of work is later transferred by future teachers to school classrooms.

Hence the tendency to provide students with more information each time. In this regard, special attention should be paid to deepening the process of updating teacher education aimed at professional training of teachers in the context of European integration [7].

Pedagogical education requires rethinking the content, its structure and forms of organization, and applying new approaches. The huge information flow, which is growing noticeably due to the entry of Ukraine into the European educational space, requires teachers not only to thoroughly prepare for the rational selection, understanding, storage and use of knowledge about the world, the number of which is growing like an avalanche, but also to develop spirituality, the sensory sphere of future teachers, the formation of new approaches to the use of Information Technology and the search for innovative methods of training specialists.

The purpose of the article: to consider the peculiarities of the formation of new approaches to the use of Information Technology and the search for innovative methods of training specialists within the pan-European educational space.

2. Analysis of recent research and publications

G. Kravchuk notes that the processes of informatization of society put forward increased requirements for graduates of higher educational institutions, who must freely navigate the information environment, search for professionally significant information, and be able to solve professional problems using modern information technologies [9].

S. Abasova emphasizes the need to ensure timely training and retraining of specialists of various profiles (in particular teachers) in the effective use of domestic and foreign electronic resources with the help of modern information technologies [1].

M. Sitarczyk [26] states that multimedia, in particular computer and television, play a positive role in the child's perspective of development and maturity.

According to L. Yurchuk, the results of a project aimed at studying the consequences of ten years of reform, development and improvement of European schools are of scientific interest. The scientist claims that the movement towards bringing the educational systems of the member

states of the European Union closer together is just beginning, since in general, high levels of various characteristics of the educational process remain in the sectors of general education and basic vocational training [32].

According to M. Vachevsky, world experience shows that any attempts to provide a high-quality educational process in the Western Military District without the development of intellectual property, scientific research, and the formation of professional competencies are doomed to failure, because they limit the creative capabilities of both teachers and students, which leads to stagnation in the development of science and education [29].

M. Zhabolenko, N. Zhdanova O. note that currently computerization of the educational process in the Western Military District of Ukraine is considered as one of the first and most promising areas for improving the quality of education of higher educational institutions. Much attention is paid to this problem, both at the level of ministries and at the level of Western Military Districts themselves. However, full – scale computerization of the educational process in Western Military Districts is a complex problem that requires long-term purposeful work and constant attention [33].

L. Pukhovska believes that the study and comparative analysis of European experience in the field of training and retraining of educational personnel are particularly relevant at the present stage of formation and development of the statehood of Ukraine. This case should be implemented in the context of a holistic study of school and teacher education management systems, in particular its final level – teachers, their role and place in the organization of the educational process, the selection of school content, the formation of curricula and plans, etc. [24].

Teacher training, as stated by Cz. Banach, is a versatile, multi-functional and interdisciplinary process covering three time dimensions (past, present and future); four levels (regional, state (Polish), European and global), as well as three areas (axiological-cognitive, emotional and practical). In scientific sources, in particular, in many reports of the European Union, it is noted that the concepts of pedagogical qualifications update the formation of relationships and a system of values, and then skills, functions and tasks performed, and the quality of knowledge. Despite numerous attempts at modernization, teacher education, especially its quality, is the subject of analysis, criticism and correction. Researchers study new solutions to the problem of teacher training and outline guidelines for their training, conduct an empirical check of existing concepts [3].

O. Kuchai in his article lights up the conceptual principles of training future teachers by means of multimedia technologies; examine the use of multimedia technologies in the training of primary school teachers and the importance of multimedia education in the informatization of society [10; 11; 12].

T. Kuchai, O. Biletska, T. Kravtsova, N. Bidyuk, V. Tretko & O.Kuchai give an emphasis to Usage of the Activity Approach in Teaching Foreign Languages in Higher Education Institutions. Also lights up the quality of higher education in the European educational space. [4; 13].

3. Research methods

Theoretical (analysis of philosophical, pedagogical, and psychological literature).

4. Results

A modern teacher should know both theoretical innovative approaches to the teaching system and practical technologies that can be applied in the educational process. Scientific and pedagogical research conducted at the National Academy of Pedagogical Sciences of Ukraine shows that training using traditional technologies does not allow you to develop key, basic competencies in a particular academic discipline. That is why it is necessary to rebuild the educational process. In particular, future primary school teachers need to purposefully and persistently master new approaches to the use of information technology and the search for innovative methods of training and retraining throughout life, intensive interactive learning technologies: role-playing, simulation games, trainings, cases, game design, critical thinking technologies, creative techniques and many other methods. Innovative technologies develop the basic competencies of the student, form the necessary skills and abilities for the profession of a teacher, create prerequisites for their psychological readiness to implement the acquired technologies in practice [15].

The key component in the innovative transformations that characterize modern teacher education is the modernization of its content. Defining the vectors of modern teacher education, scientists should take into account the general civilizational trends in the development of national educational systems in the XXI century, which, in particular, include the systematic improvement of the quality of education, its humanization and humanitarization, development based on the principles of continuity, the formation of a single educational space in Europe and the transition to innovative learning. As the latest guidelines of the educational policy of Ukraine, these trends put forward a set of requirements for professional and personal qualities of a teacher and made it necessary to reorient teacher education to the education of a new generation of professionals [7].

Distance learning is recognized as one of the priority areas of the program of modernization of general education and higher schools.

Distance learning has a number of undeniable advantages. In particular, a higher education applicant can

study at a convenient time, in a familiar environment and at a relatively autonomous pace. It is also worth considering the lower cost of such training, since there is no need to rent premises, pay a significant number of staff and save time [30].

The effectiveness of pedagogical support in the process of distance learning is achieved by the following conditions: the presence of students' computer literacy, taking into account the psychological patterns of perception, memory, attention and age characteristics of students, their individual and personal characteristics, the creation of psychological comfort, which includes the ability of the teacher to dialogue by means of information technologies, to find an individual approach to students, the implementation of specially organized self-control of students and systematic control of the teacher over the generalization of knowledge provided for in the development of appropriate training programs for teaching a foreign language, students' possession of independent work skills, ensuring effective interaction of all components of the distance learning system.

Each country needs to build its capacity to provide blended learning models. All educational institutions should be better prepared (if necessary) for the transition from full-time to distance learning. This will protect education and create opportunities for more individualized approaches to teaching and learning not only during future pandemics, but also during other upheavals, such as natural disasters, which is possible with the development of Flexible Curricula that can be taught in person or online. In addition, all teachers, including foreign language teachers, should be well trained to manage a wide range of IT devices and guide the reform of the education industry in accordance with the standards of the European education area.

This is a long-term process and Ukraine is working in this direction. The authorities are developing rules for distance education, applying more extensive use of blended learning approaches, and working to increase the number of educational institutions with internet connectivity and access to digital devices and equipment. Such targeted work will help educational institutions not only overcome the effects of COVID-19, but also introduce more sustainable and flexible approaches in future educational activities aimed at maintaining continuity of learning and operational sustainability in higher education, through measures to expand the digitalization of the sector [15].

The introduction of distance technologies in the educational process is aimed at a deeper understanding of the educational material; the formation of such competencies as: communicative (direct communication using the network), informational (search for information from various sources and the possibility of its critical understanding), self-education (the ability to learn independently). As practice shows, if a student does not

learn to make decisions independently, determine the content of their educational activities and find ways to implement them, they will not be able to master a particular discipline in a high-quality way. In addition, distance learning also performs an educational function – it contributes to the formation of leading personality traits: activity, independence, self-improvement, creativity [5].

European integration processes have become a catalyst for the emergence of a new type of educational environment, which is characterized by the competent flexibility of specialists in the European Space. In the process of European integration and democratization of society, the spread of the idea of humanizing education and personal development priorities has become of great importance. Among the conditions for the formation of this system is the provision of opportunities for choosing an educational institution and curriculum in accordance with the individual characteristics of the child; stimulating children's achievements in various fields of activity; social and pedagogical protection of children; the development of integrated, innovative approaches and methods of Child Development [20].

One of the most urgent tasks of the theory and practice of organizing the educational process in European schools is to form new approaches to the use of Information Technology and search for innovative methods of teacher training that would develop the ability not only to use new tools, but also to constantly update these changes in the continuous improvement of information tools. It is obvious that all this is inextricably linked with the field of continuing education of teachers, with the opportunity to combine periodic internships in training centers with self-education.

European scientists have achieved the greatest success in classifying new requirements for teachers, which is a consequence of global and national changes in educational systems under the influence of many external forces. For example, UNESCO experts, based on discussions and a comparison of different views, concluded that there is a need for fundamental changes not only in the secondary characteristics of teacher education (methods, means, forms of practice, etc.), but also in the entire paradigm. The main reason for this "paradigm renewal" is the change in the goals of European education of the XXI century [32].

Integration processes taking place in Europe make it necessary to transform the educational system of the XXI century by updating it, taking into account the fundamental values set out in the report of the European Commission "Education for Europe": fundamental human rights and freedom, human dignity, democracy, peace and rejection of all violence, respect for others, solidarity, progressive development, equality of opportunity, rational thinking, ecosystem protection, responsibility. The educational policy recognizes common values and educational priorities,

although a common model of a universal European School has not yet been developed [19].

The main requirements of the European Union for the quality of education are the need to democratize the school, improve the quality of Education, form a new type of teacher who has the appropriate competencies and qualifications, educate a European citizen – a "local citizen" and a "citizen of the world", responsible for life in his country, in Europe and in the world.

Among the educational priorities of Europe is the creation of a new model of a teacher who has an academic education (regardless of academic degree and specialty), knows innovative methods, and is able to respond efficiently, professionally, adequately, quickly and correctly to changes and innovations. Professional training of teachers focuses on the development of such qualities and traits as professionalism, creativity, reflection, independence, tolerance, openness, communication skills.

The teaching profession is now the subject of research in various fields of science, especially pedagogy, psychology and sociology. Psychology presents the problems of the teacher's personality, the significance of various personality traits for the profession; sociology focuses on the socio-professional role of the teacher in the educational process, especially in the context of the quality and effectiveness of the educational system.

Pedagogical scientific works are dominated by the thesis that the results and development of the educational process are mainly determined by the teacher's personality and most depend on the characteristics of its formation, the set of psychophysical qualities and traits of the teacher. According to many researchers, all this affects the quality of pedagogical work [19].

The problem of professional training of teachers for teaching activities within the pan-European educational space is quite relevant, which implies that the teacher has such qualities as a clear civic position; a system of values that necessarily includes recognition of the diversity of the world and tolerance; a democratic style of work; a high communicative culture; the ability to involve students in planning and regulating the educational process. In this regard, the requirements for professional training of teachers are complicated and diverse, which should form the readiness of future teachers to educate children and youth in the context of pan-European values.

Modern Europe focuses on professional training of teachers for pedagogical activities in a diverse student environment with mandatory consideration of individual, psychological and age characteristics of children's development, as well as the characteristic features of the socio-cultural environment, mentality, ethical, religious and political factors [18].

Education in the European dimension faces the following tasks: educating the future teacher in a spirit of tolerance, respect and friendship towards other peoples;

developing the idea of European Unity, democracy and respect for the rights of another person; developing the ability to establish relationships through dialogue and compromise; developing effective communication; preparing to participate in activities in conditions of diversity and cultural differences; environmental, economic, information-multimedia and language communication based on creative approaches.

Intensive integration processes in modern Europe are causing a number of changes in the field of education. The teaching profession is recognized as a specialty that requires special responsibility. Its complexity is motivated by the need for activities aimed at the student as a subject of training. This means that part of the responsibility is transferred from the institution directly to the teacher [28].

The pace of technological, economic and political changes encourages teachers to continuously improve their professional skills. The idea of normative education is widespread in many European countries. According to D. Dzevulyak, education should be implemented in various forms: centers for professional development (Denmark, Greece, Belgium, Germany, Spain, Italy), primary education centers (Luxembourg, France) and other educational institutions. Training should be conducted by methodologists, inspectors and specialists in professionally oriented disciplines. Especially popular is the so-called "cascade" method, which consists in training certain groups of teachers for teaching at universities (Holland, France) [6].

At the beginning of the 21st Century, the concept of "European dimension in education" became widespread in the educational policy of the European Union and the Council of Europe, which is interpreted as a standard of knowledge about Europe; the study of traditions, culture, language and economic situation of other countries to obtain a comprehensive understanding of Europe and multidimensional within its borders; the establishment of a sense of European identity in people; understanding the values of European civilization and the foundations of the development of the European Community; the preparation of future generations to participate in the social and economic development of European countries; the enrichment of knowledge about the common historical and cultural heritage, the presence of all prerequisites for the formation of a European personality, or a person of Europe.

Now in Ukraine, there is a change in value systems that have formed the basis of society and the state for a long period. The professional and pedagogical mentality of a Higher School teacher is undergoing a complete value-semantic restructuring due to its radical transformation and system-functional modifications. The system of declaration of surrogate-collectivist, paternalistic values in higher education, which has existed for several decades, is being replaced by a new system of values that provides for a clear orientation of teachers to the already mentioned European values. So, the outlined problem has been particularly

relevant in recent years, taking into account the intensive processes of European integration of Ukraine in the economic, geopolitical, social, educational and personal planes [22].

The process of teacher training in European institutions of Higher Education covers the following tasks: activities in small groups; organization of interactive learning; application of modern educational and telecommunications multimedia technologies; work on the profile orientation of students at various levels of the educational process, especially at the secondary school stage; development of programs that provide for updating and expanding the knowledge of graduates of incomplete and full secondary schools about professions that are needed in the labor market.

When training teachers in higher education institutions, it is necessary to take into account that the activities of future teachers will be implemented in the conditions of mass education, and this requires the use of various forms of education in classes that consist of students with different opportunities and educational needs. All this is connected with the need to select the appropriate goals, content, methods and means of educational work. In the process of professional training of teachers, it is predicted to abandon subject specialization and introduce polyvalent specialization, which goes beyond teaching one subject and gives graduates of Higher Educational Institutions new, wider opportunities for professional activity [14].

The idea of integration is particularly common in primary education, where there are changes in the learning model. The peculiarity of a teacher's professional work is that theory and practice are not yet an integration of knowledge. D. Klus-Stańska focuses on the interrelation of goals, content, organizational forms, industries, methods, forms of activity of children and teachers, educational proposals, living environments of the child, all educational subjects.

Knowledge of the social sciences should stimulate reflection and encourage a change in thinking in school, which generates modifications in the training of future teachers.

Analyzing the idea of integrating academic learning, it should be noted that in preparing students for the teaching profession, it is necessary to take care of the correlation of subject competencies, which include, for example, research and evaluation of the course, as well as learning outcomes; planning and organizing didactic and educational work; proper communication, conflict resolution; conducting discussions on theoretical and practical dilemmas of modern pedagogy.

Sociological training also deserves attention, which provides for the assimilation of knowledge on the sociology of education, the sociology of small groups and preparation for social life. Concentrated efforts should be made to organize the teacher's work with students, implementing

methodological training, which is almost two-thirds of the hours in training, as well as practical training. Methodological training, expressed in the form of knowledge from the field of theory and teaching methods, has an integrative character, that is, it combines the content, activity and method of their implementation. The student's creativity depends on this, and therefore, the stimulation and support of the comprehensive development of the child's personality.

Psychopedagogic and methodical training is important in teaching, but it should not overload either teachers or students. Theoretical training in professional training of teachers performs fundamental functions: purposefulness on the practical action of students; integration of actions of future teachers; understanding the situation in the classroom, which allows you to make effective decisions.

In addition, pedagogical subjects, as well as methodological ones, should activate students' reflection on the meaning of education in general, and especially on the laws and ways of achieving their goals in the teacher's didactic and educational work. Such reflection is not enough for students, since academic training should form its own concept of theory and pedagogical practice [2].

A European teacher should have a high-quality higher education, be creative and open to new knowledge, be able to form these skills in a student, love their work, respond quickly and rationally to the progressive and creative process, constantly improve their professional skills, be an intellectually interesting person, know their subject deeply, as well as history, politics and economics, participate in public life, serve as a model for their students, have reasonable knowledge about the development opportunities of their students, demonstrate the abilities of the organizer of the didactic process, constantly learn [16].

In many European countries, civilizational trends and areas of activity are noticeable: decentralization of education and educational pluralism. J. Niemiec emphasizes the need for constant self-education and greater freedom of teachers, taking into account the autonomy of educational processes. The researcher also focuses on the need for transformations in the field of qualification concepts of a modern teacher: defining categories of professionalism, which is expressed in a creative approach and individual, author's proposals to improve the quality of teaching [17].

European integration requires overcoming contradictions, stereotypes and controversial issues that are now difficult to predict. Modern socio-economic changes are so rapid, and the living conditions of the new generation have so little in common with the conditions in which previous generations were formed, that the experience of the past period becomes too little for the education and upbringing of children and young people. European integration creates favorable conditions for the development of Science and Education. Ukraine's presence

in the stage of intensified transformations actualizes the question not only of the justification of the modernization of education, but also of its irreversibility. The transition from adaptive learning to personality-oriented learning is becoming increasingly necessary [23].

R. Pachociński describes the following main trends in the education of teachers in modern Europe: the need to deepen and expand subject-training programs in pedagogical institutions of Higher Education, which will allow autonomy of activity, awareness of responsibility for independent creative decisions, create favorable conditions for the development of professionalism. According to the researcher's reasoning, in European countries there are traditional models of primary education, teacher training, containing three components: academic training in the field of subject specialty; theoretical basis of pedagogical knowledge (pedagogy, philosophy, history, sociology, developmental psychology); pedagogical practice at school.

At the present stage, various models of teacher training are being developed based on the University and practical concept. On this basis, two different theories of perception of teacher education were formed: as preparation of teachers for work throughout their professional career; as preparation for the first years of professional work, which is periodically repeated in the process of continuous professional training and improvement [21].

The main principle of reforming the Polish educational system is the rejection of encyclopedic training, where the student must master a clear meaning in order to implement the external requirements of the school. It is noted that education that involves obtaining certain knowledge without taking into account the psychophysical needs of the child is not profitable. Because of the reform, a new three-stage system of education was introduced, covering: a six-year Primary School, a three-year gymnasium and Supra-gymnasium schools. The first stage of primary school (grades I – III) is called Integrated Education.

Issues related to integrated learning are of particular interest to both theorists and practitioners of primary education, since the first years of a child's education play a significant role in its versatile development. Integrated education provides great opportunities for children with special educational needs to function.

The term "integration" became extremely important in Polish education at the end of the XX century, especially in the field of primary education. The main goal of integrated education is to become a student as a person. The student should acquire knowledge in an atmosphere of stimulation that will develop his critical and creative thinking [25; 31].

Now higher education in Ukraine is undergoing a stage of renewal: the legislative framework has been modernized not only in organizational terms, but also in line with new qualifications, the content of education and its results, etc. At the same time, it is psychologically important that the world has become different – open, where masses of people

move freely, and those who live tens of thousands of kilometers from each other are in a single information space.

The problem of perception of information offered from various sources is actualized: textbooks, teachers' material, television, the Internet, etc. Modern people understand and comprehend both the world and themselves in it in a new way. In this regard, it is important to theoretically justify and experimentally check how, where and to what extent computerization of learning should take place, so that students' work with a computer does not reduce the initiative of their thoughts, does not impoverish the activity of creative imagination and at the same time does not lead away from the real world, contributing to the intensive development of the qualities of active subjects.

Rapid response to innovations requires purposeful, conscious, persistent efforts in the development of those universities that are most ready to move to a qualitatively new level of training of highly qualified specialists [7].

Conclusions

European scientists are working to unify common standards in the field of Education, which are aimed at providing all applicants, regardless of education and specialization, with a full Higher Education.

Among the advantages that the use of Information Technology and the search for innovative methods of training specialists to implement the learning process, it is worth mentioning the following: simultaneous use of several channels of perception of the student or student in the learning process, thanks to which the integration of information processed by different sensory organs is achieved; the ability to simulate complex real experiments; visualization of abstract information by dynamic representation of processes, etc.

The process of informatization of education, supporting the integration trends of cognition of the laws of subject areas and the environment, actualizes the development of approaches to using the potential of information technologies for the development of schoolchildren's personality. This process increases the level of activity and reflection of the student, develops the abilities of alternative thinking, the formation of skills to outline a strategy for finding solutions to both educational and practical problems, helps to predict the results of implementing decisions made based on modeling the studied objects, phenomena, processes and relationships between them. Multimedia as a learning tool is used in various educational contexts, providing multimedia products and information resources of the Internet for learning, developing practical skills and developing critical thinking. Multimedia products can contribute to improving the quality of education in certain subject areas and at the border of scientific areas. So, the use of multimedia technologies in the educational process

of higher education institutions and schools allows us to move from a passive to an active way of carrying out educational activities, in which the student or pupil is the main participant in the learning process.

Summing up, we note that the creation of new ideas for professional teacher training is one of the most important priorities of educational policy in Europe. Nowadays, teachers need to have all the latest means of using the Internet to accumulate information that is significant in the aspect of professional development. It is necessary to know several foreign languages and constantly use them not so much for reading materials, but for communicating and interacting with colleagues from other countries, creating and implementing pedagogical projects, conducting excursions, exchanges, internships, etc. [32].

Much attention is paid to the formation of new approaches to the use of Information Technology and the search for innovative methods of training specialists within the pan-European educational space. The teacher should be ready to perform educational, guardianship, orientation, coordination functions, love their profession, actively and constantly improve their professional competencies, and demonstrate openness to progress and creativity. EU countries are striving to develop a unified concept of professional training of future teachers.

References

- [1] Abasova S. (2006) Informatics and software engineering in education. *Telecommunications and informatization of education*. 4. 84-87.
- [2] Adamkiewicz A. (2011) Aspekt pedagogiczny, metodyczny i praktyczny w przygotowaniu studentów do wykonywania zawodu nauczyciela. *Wybrane zagadnienia w edukacji wczesnoszkolnej i przedszkolnej w teorii i praktyce*. Legnica: Państwowa Wyższa Szkoła Zawodowa im. Witelona w Legnicy. 3-11.
- [3] Banach Cz. (1998) Koreferat. Społeczeństwo polskie wobec wyzwań transformacji systemowej. *Komitet Prognoz «Polska w XXI wieku» przy Prezydium PAN*. Warszawa. 78.
- [4] Biletska, O., Kuchai, T., Kravtsova, T., Bidyuk, N., Tretko, V., & Kuchai, O. (2021). The Use of the Activity Approach in Teaching Foreign Languages in Higher Education Institutions. *Revista Românească pentru Educație Multidimensională*, 13(2), 243-267.
- [5] Datsenko G.V., Suzanska Z.V. (2017) Distance learning as a means of stimulating self-education. *Distance learning as a modern educational technology: materials of the inter-university webinar (Vinnytsia, March 31, 2017) / ed. L. B. Lishchynska*. Vinnytsia: VTEI KNTEU, 17-20.
- [6] Dziewulak D. (1997) Systemy szkolne Unii Europejskiej. Warszawa: Żak. 472.
- [7] Evdokimov V. (2011) Ways to improve pedagogical education in the conditions of European integration. URL: http://archive.nbuv.gov.ua/portal/soc_gum/novkol/2011_2/102.pdf.
- [8] Klymenyuk Yu. M. (2009) Preparation of the future teacher for the development of intellectual giftedness of

- elementary school students: diss. for obtaining sciences. candidate degree ped. Sciences: specialist 00.13.04. Zhytomyr. 256.
- [9] Kravchuk H. (2006) Formation of information competence of future economists. *Pedagogy and psychology of professional education*. 1. 34-39.
- [10] Kuchai O.V. (2014). Conceptual principles of training future teachers by means of multimedia technologies. Tutorial. Cherkasy: publisher Chabanenko Yu. A.
- [11] Kuchai O.V. (2015). The use of multimedia technologies in the training of primary school teachers. Tutorial. Cherkasy: publisher Chabanenko Yu. A.
- [12] Kuchai, O., Skyba, K., Demchenko, A., Savchenko, N, Necheporuk, Y., & Rezvan, O. (2022). The Importance of Multimedia Education in the Informatization of Society. *IJCSNS International Journal of Computer Science and Network Security*, 22(4), 797-803.
- [13] Kuchai, T., & Kuchai, O. (2019). Ensuring the quality of higher education in the European educational space. *Scientific journal of the Vasyl Stefanyk Pre-Carpathian National University*. Educational space of Ukraine, 16, 15-19.
- [14] Kupisiewicz Cz. (1999) Nauczyciel w świetle raportów Unii Europejskiej II Rzecz o kształceniu. Wybór rozpraw i artykułów I red. C Kupisiewicz. Warszawa. 342.
- [15] Kuzminskyi A. I., Kuchai O. V., Bida O. A., Chichuk A. P., Sigetii I. P., Kuchai T. P. (2021) Distance education in the training of specialists in institutions of higher education. *Modern information technologies and innovative methods of training in the training of specialists: methodology, theory, experience, problems: a collection of scientific works*. Vinnytsia: "Druk Plus" LLC., Issue 60. 50-58.
- [16] Lewowicki T.(1993), Podmiotowosc W. edukacji, Encyklopedia pedagogiczna-red Pomykalo
- [17] Niemiec J. (1998) Cywilizacyjne intencje w kształceniu nauczycieli II Edukacja nauczycielska w perspektywie wymagań zmieniającego się świata. I red. A. Siemak-Tylikowska, H. Kwiatkowska, S. Kwiatkowski. Warszawa: Żak, 34-38.
- [18] Onufrienko N.O. (2007) European values in the professional training of history teachers (late 20th–early 21st centuries). *Culture of the peoples of the Black Sea region*. 104. 134-137.
- [19] Ordon U. (2006) Professional competences of elementary school teachers in the context of European integration processes: On the example of the education system of Respublika Polska: dissertation. ... Dr. Ped. Sciences: 13.00.01. M.: RGB. 587.
- [20] Ostroushko Yu. V. (2011) The influence of European integration processes on the preparation of the future teacher of technology for professional activities in the field of inclusive education. *Discussing the problem Scientific Notes Series: Pedagogy*. 4. 200-206.
- [21] Pachocinski R. (2000) Współczesne systemy edukacyjne. Warszawa: IBE. 342.
- [22] Pashchenko S. Yu. (2012) Pedagogical mentality as an integrated factor of professional self-awareness of a teacher of a higher school. URL: http://archive.nbuv.gov.ua/portal/soc_gum/tipp/2012_1/Plasch.pdf
- [23] Prokopenko I.F. (2013) Innovative technologies of teacher training in the conditions of European integration. URL: http://library.kpi.kharkov.ua/JUR/TPUSS%202013_2_3.pdf.
- [24] Pukhovska L.P. Problems of integration of pedagogical education of Ukraine into the common European educational space. URL: <http://eprints.zu.edu.ua/596/2/%D0%BF%D1%80%D0%BE%D0%B1%D0%BB%D0%B5%D0%BC%D0%B0op.pdf>.
- [25] Sarud M. (2002) Wzór osobowy nauczyciela w opinii uczniów i rodziców *Dyrektor Szkoły*. 12.21-22;
- [26] Sitarczyk M. (2005) Bohaterowie telewizyjni w percepcji dzieci sześciolletnich. Kontekst emocjonalny i społeczny. *Rozwój i edukacja dziecka: szanse i zagrożenia*, red. S. Guz. Lublin. 353.
- [27] Szymański M.S. (2002) Nauczyciel w okresie przemian społecznych II Edukacja. 3. 317;
- [28] Tchorzewski A. (1985) Świadomość zawodowa a niektóre przejawy aktywności studentów. Bydgoszcz. 324.
- [29] Vachevskyi M. (2005) Theoretical and methodological foundations of the formation of future marketers' professional competence: Monograph. K.: VD "Professional".
- [30] Vlasenko I.H. (2017) Implementation of distance learning - a requirement of modernity . *Distance learning as a modern educational technology: materials of the inter-university*. Webinar (Vinnytsia, March 31, 2017)/ed. L. B. Lishchynska. Vinnytsia: VTEI KNTEU. 12-14.
- [31] Wołosiuk B. (2010) Wychowanie do wartości w edukacji wczesnoszkolnej. Lublin: KUL. 286.
- [32] Yurchuk L.M. (2003) Status and development trends of the system of post-graduate pedagogical education in Poland: diss. for obtaining sciences. candidate degree ped. Sciences: specialist 13.00.04. Kyiv.194.
- [33] Zhabolenko M., Zhdanova N. (2007) Innovations in the field of using information and communication technologies in the educational process. *The strategy of innovative development of the higher education system in Ukraine: Materials of the international science and practice conf. / Chairman ed. S.V. Smerichevska*. Donetsk: Kalmius Publishing House. with. 157-161.