



ИННОВАЦИИ В НАУКЕ И ОБРАЗОВАНИИ

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PROFESSIONAL PEDAGOGICAL EDUCATION IN THE CONDITIONS OF INFORMATIZATION OF SOCIETY: REQUIREMENTS FOR THE CONTENT OF TRAINING FOR FUTURE TEACHERS

Informatization and digital transformation of education require a fairly high competence in the field of ICT from a modern teacher; the level of his ICT competence ultimately determines the quality of education. It is noted that national state educational standards do not always pay due attention to the development of ICT competence of future teachers in the process of obtaining higher education. Defined the requirements for the content of professional pedagogical education in the conditions of informatization of society.

The content of a teacher's professional activity, as well as the content of education, are determined by the needs of social development. Education should solve both current and future problems. Education, as noted in UNESCO documents, should play "... a key role in determining the course of our movement within the predicted and possible scenarios of the future in the interests of choosing the preferred option for humanity and the planet for further development" [1, p. 2]. The strategic goals of education are closely linked to the problems of social development in all developed countries of the world, including Russia [2] and the Republic of Belarus [1].

The 21st century is the century of informatization of society. IR technologies are rapidly penetrating into all spheres of modern life. The modern world is characterized by rapid transformations in science and industry, in all areas of the economy. Fundamental changes in recent decades have also taken place in the worldview of man. Today, in society as a whole, and separately in each person of society, there is an increased awareness of the importance of information for human life, its processing by means of digital technologies; the real and digital worlds, natural space and digital environment are perceived by a modern person in an inseparable unity, as integrity; quite acutely modern man is aware of the need for direct ("non-digital") communication.

Features of modernity require teachers to have a confident knowledge of IC-technologies. This competence underlies the effective solution of the problems of preparing children and young people for life in a society in which all spheres of life actively use digital resources. Thus, a problem arises: to determine the key requirements for the content of continuing professional education of teachers in the conditions of modern and future needs of the information society.

The purpose of the study: to identify the key requirements for the content of continuous professional pedagogical education in the conditions of informatization of society.

The methodological basis of the study is the conceptual ideas of pedagogical schools in Russia, Belarus, the USA and European countries: the content of education (V. I. Zagvyazinsky, V. S. Lednev, V. A. Sitarov, G. P. Shchedrovitsky, W. Okon, etc.), the quality of training of teaching staff (V. P. Borisenkov, O. V. Gukalenko, A. I. Zhuk, N. N. Koshel, M. L. Levitsky, V. A. Mizherikov, M. M. Potashnik, A. N. Sergeev and others), implementation of the competency-based approach in education (A. N. Chomsky, E. L. Low, V. A. Gaisenok, I. A. Zimnyaya, O. A. Oleks, A. V. Khutorskoy and others), informatization of education (V. V. Grinshkun, A. I. Kravchuk, V. P. Polyakov, I. V. Robert, I. V. Trusevich, M. Harwardt, P. J. Niermann, S. Boyd, H. Grayson, T. Eckhardt, J.-L. Durpaire, H. Laakso, and others). The materials of the study are the factology of the state of the system of training pedagogical personnel in Russia in the conditions of informatization of modern society. Basic research methods: analysis, classification, generalization.

Research results. The modern teacher (teacher, lecturer, upbringing), as a professional, is called upon to contribute to the fulfillment of the "social order of society." The teacher, through his professional activities, solves the most important task that the education system faces – he must ensure the quality of the educational process. In the conditions of informatization of society, the

solution of this problem is connected with the inclusion of digital educational resources in the educational process. The use of ICT in education makes it possible to ensure that students achieve the required educational results, including ensuring the formation of an information culture among students. The results of numerous studies conducted in many countries of the world over the past decades show that it is the teacher who plays a key role in the transition to digital rails not only in education, but also in society as a whole. It should be borne in mind that a modern teacher can form an information culture among students only when he himself has it. The teacher himself must be competent, at least, in the use of IC technologies; ICT competence should be integrated into all components of a teacher's professional activity (we note that the problem of developing teachers' ICT competence is typical not only for the countries of the post-Soviet space, but also for all countries of the world (see, for example: [4; 5; 6])).

In Russia and Belarus, the requirements for teacher training in the field of ICT are defined by a number of state documents, among which the state educational standards of higher education play an important role.

An analysis of the state educational standards of higher education shows that the content of the teacher's knowledge of IC technologies is disclosed in them quite superficially. For example, in the Russian federal state educational standard of higher education – bachelor's degree in the field of study 44.03.01 Pedagogical education – the requirements for the formation of ICT competencies in future teachers include the "universal" competence UK-1 (provides for the formation, in particular, information search skills) and "general professional" competencies GPC-2, GPC-9 (require, respectively, the use of IC technologies in the development of basic and additional educational programs and their components and the ability to "understand the principles of modern information technologies and use them to solve problems of professional activity" [7]). This educational standard does not regulate the presence in the group of "professional" competencies of the requirements for a graduate of a pedagogical university to have the skills to use IC technologies [8, p. 3–4]. Thus, in fact, it is recognized that this requirement does not apply to the mandatory professional competencies of a teacher.

A similar situation is observed in the educational standards of higher education in the Republic of Belarus. For example, in the layout of the educational standard of higher education of the 1st stage [9], individual components of ICT competence are affected in the "universal competencies" UK-1 (Know the basics of research activities, search, analyze and synthesize information) and UK-2 (Solve standard tasks of professional activity based on application of information and communication technologies), as well as in the "basic professional competencies" BPC-12 (Be able to analyze sources of information, highlight the most significant facts, give them their own assessment and interpretation ...) and BPC-13 (Be able to independently use printed and electronic sources to search for information on topics related to future professional activities ... independently catalog the accumulated array of information).

For comparison, we note that in international documents the formation of a teacher's ICT competence is a key requirement for his preparation [10, p. 6]. Thus, the UNESCO recommendations conceptually define the mechanisms for the purposeful level formation of a teacher's understanding of the role of IC technologies in educational policy, skills in designing curricula and their assessment using IC technologies, skills in designing and implementing pedagogical practice and working with digital technologies, skills in managing the educational process., the ability of a teacher's professional development based on the use of IC technologies [11, p. 11–13]).

Thus, today the training of a teacher both in Russia and in the Republic of Belarus is based on the assumption that a university student – a future educator, teacher, upbringing – even while studying at school, the information culture and competence in using IC technologies were sufficiently formed. However, practice shows the opposite – the level of knowledge of IC technologies, as well as the level of personal understanding of the characteristics of the information society among school graduates leaves much to be desired. In fact, the absence of a clear state regulation of the content of this competence at the level of the teacher training profile, the vagueness of the requirements for IC competencies of future teachers, the "applied" nature of these requirements are, in our opinion, the reasons for the insufficient, in general, level of professional training of teachers in the field of ICT [12; 13].

A student-future teacher must be purposefully prepared for professional activities using IC technologies; it is necessary for a practicing teacher to systematically form professionally

demanding ICT competencies. Only if these conditions are met, a modern teacher will be able to: ensure quality in achieving the goals of education and solving educational problems; promptly take into account in professional pedagogical activities the features, needs, opportunities and threats of informatization of society; effectively organize the "pervasive education" of the young generation based on the management of the integration of formal and non-formal, traditional and "electronic" education; effectively build their professional activities (educational process, methodical work) not only as a user, but also as a developer, generator of modern educational tactics, models, technologies, educational content.

When designing the content of teacher training, as well as the content of advanced training of teaching staff, all aspects and factors of informatization of society and the digital transformation of education, the possibilities of digital educational resources and IR technologies should be taken into account as much as possible [14]. The most important among them are: the requirements of society for the quality of training of teaching staff; the need for ICT competence in the professional activities of a teacher in a modern school and in the future; the need to take into account the correlation between formal and non-formal education strategies, stationary and distance learning, traditional and digital educational models and technologies; the need to take into account the influence of the information space on the formation of the worldview and life experience of young people.

Taking into account the above factors that are significant for the systems of training and advanced training of pedagogical personnel, it is advisable to single out the following requirements for the content of professional pedagogical education in the conditions of informatization of society:

- strengthening the axiological component of professional pedagogical education. Informatization of society enhances the importance of the teacher in the education of the younger generation. A modern teacher, upbringing, lecturer (both future and leading educational practice) must be aware of his mission, be confident in the importance of his profession, be personally psychologically ready to carry out educational activities, taking into account the characteristics of the information society. It should be borne in mind that today young people are being prepared for pedagogical activity, brought up on the content of the digital information space, where the role of the teacher in the development of society is downplayed, and the teacher is often, unfortunately, presented in a negative context;

- focus on the formation of the design component of professional activity among teachers. The practice of education necessitates:

- the formation of teachers' skills in developing methodologically sound educational concepts and programs aimed at achieving the requirements of educational standards (the corresponding level of education), taking into account both the actual state of informatization of the educational process and the prospects for saturation of a particular educational institution with IC technologies;

- the formation of experience for teachers in designing and filling the digital environment of an educational institution with high-quality educational content. The existing practice of training and advanced training of teaching staff is mainly adaptive – it is focused on adapting traditional models and technologies of training and education to the needs of society by means of introducing existing IC technologies into the educational process. The engineering concept assumes in the preparation of teachers, on the one hand, taking into account the traditions of national education, and on the other hand, a balanced orientation to the best examples of modern domestic and foreign educational practices. This concept is aimed at developing professional skills among teachers, implemented within the framework of a personality-oriented approach in education (see, for example: [15]) and ideas of didactic constructivism [16]: expedient equipment of the space of an educational organization with smart technology (electronic boards, virtual and augmented reality devices, etc.); engineer of professional activity and possession of modern models of organization of educational work in the electronic campus; variable application of information network resources, resource base of electronic educational systems, social networks; implementation of distance and hybrid learning models;

- targeted training of teachers for the plan and realisation of the educational process. The education system is based on the highly moral ideas of spirituality. IC technologies make it possible to seamlessly integrate the digital information environment into the existing system of education, to activate and "modernize" the process of educating children and youth. The use of ICT in education

makes it possible to remove organizational and time frames in educational labor with young people, to get closer to solving the problem of Internet addiction of young people [17], multimedia content and hypertext, social networks make it possible for adults to "get closer" to the younger generation, to understand and accept their views and worldview, daily activities and life in general [18; 19; 20];

- the formation of teachers' competence in the field of ensuring the information security of children and youth by psychological and pedagogical methods. This competence implies that the teacher has both knowledge and skills in the field of information security, and the skills to implement various measures of a psychological and pedagogical nature aimed at protecting (including at the warning stage) children and young people from information content that negatively affects their psyche, protection against cyber threats, etc. [21; 22];

- the systematic formation of future teachers' profile skills in mastering innovative ICT in their professional activities, the formation of experience among practicing teachers in the variable use of IR technologies in the educational process. The formation of the ICT competence of a teacher implies, first of all, adequate to the level of informatization of society (taking into account the prospects) the provision of the educational process of training teachers with hardware and software (saturation of the education system with various devices, smart technology and digital resources), access to resources global network. It is necessary to orient the training of teaching staff towards the widespread use of not just modern, but advanced, innovative and promising ICT, reorientation of the content, methods and forms of education and upbringing to them;

- orientation towards increasing the targeting of continuing professional education of pedagogues. Informatization goes to education, to a specific school, classroom, together with a specific teacher, lecturer, upbringing. The pedagogue is always individual, his preparation should be as personalized as possible. The content of pedagogical education should make it possible to effectively implement the individual trajectory of professional training and self-realization of a teacher, educator. In particular, this will be facilitated by: diagnostics for professional suitability in the selection of applicants, a decrease in the number of students in academic groups, targeted training and early assignment of the future teacher to the school – his place of the future work, the introduction of the institute of "pedagogical internship", the introduction of a practical exam as a form of state certification of graduates of pedagogical universities, development of the institution of mentoring in educational institutions, financially corresponding compliance of the teacher's salary with his qualifications, including in the variation between use of ICT.

It is important in determining the requirements for the content of the training of teaching staff to work in the conditions of informatization of society and education, it seems to ensure the parity of interests of state and public institutions, interested commercial organizations, and the personal interests of future teachers. Training teachers, improving their qualifications in the context of informatization of society and saturation of the education system with digital resources and ICT requires the development of public-private partnerships.

Conclusion. Determining the content of teacher training and advanced training of teaching staff in the context of informatization of society is a multifaceted, complex problem. The complexity of its solution is due, first of all, to the rapid penetration of digital technologies and information resources into the life of society and every person. The rapidity of the informatization of society and the digitalization of life causes some unpredictability in the development of society and, accordingly, the uncertainty of the requirements for the education system, for the content of teacher training. The solution to the problem is seen in a qualitative, detailed, objective analysis of the trends that have manifested themselves in education and society over the past decade, as well as in the systemic integration of the efforts of all interested institutions.

List of literature used

1. Conceptual understanding and determination of prospects for the development of education. International Commission on Educational Prospects (1st, Paris). UNESCO, 2020. – 4 p. URL: https://unesdoc.unesco.org/ark:/48223/pf0000373208_rus?7=null&queryId=a83fb147-f35a-46a9-b81f-edc36b84dce2 (accessed: 10.01.2023).

2. On the National Doctrine of Education in the Russian Federation : Decree of the Government of the Russian Federation of October 4, 2000 No. 751 // Rossiyskaya Gazeta. October 11, 2000.
3. On the Concept of development of the education system of the Republic of Belarus until 2030 : Resolution of the Council of Ministers of the Republic of Belarus № 683 on November 30, 2021 // National Legal Internet Portal of the Republic of Belarus, 02.12.2021, 5/49678. URL : <https://pravo.by/document/?guid=12551&p0=C22100683&p1=1> (accessed 10.02.2023).
4. Yang, Lee and Martinez Abad, Fernando and Garcia-Olgado, Alicia. (2022). The study of factors affecting the perception of digital competencies by teachers before and without employment in the Anhui region of China. *Education and information technology*. 27. 1-26. 10.1007/s10639-022-11085-6.
5. Sillat, Linda and Kollom, Kayre and Tammets, Kayrit. (2017). Development of digital competencies in the training of preschool teachers. 1806-1813. 10.21125/edulearn.2017.1382.
6. Fokides, Emmanuel and KOSTAS, Apostolos. (2020). Teachers before starting work and computers: (still) problematic relationships. 10.4018/978-1-7998-0238-9.ch002.
7. On approval of the Federal State educational standard of higher education – Bachelor's degree in the field of training 44.03.01 Pedagogical education : Order of the Ministry of Education and Science of the Russian Federation dated February 22, 2018. № 121. URL : <https://base.garant.ru/71897858/> (accessed: 01/21/2023).
8. Layout of the educational standard of higher education of the I stage // State educational Institution "Republican Institute of Higher Education". URL: https://nihe.by/images/norm-c/norm-doc/maket_obraz_standart-1.pdf (date of application: 24.01.2023).
9. Structure of ICT competence of teachers. UNESCO recommendations. UNESCO Competence System in the field of ICT for teachers. UNESCO 2019. 70 p. [Electronic resource]. URL: <https://iite.unesco.org/wp-content/uploads/2019/05/ICT-CFT-Version-3-Russian-1.pdf> (accessed : 12.01.2023).
10. Media and information literacy in the digital world: how to teach teachers. Collection of articles / ed. Yu.Yu. Cherny, T. A. Murovana. – Moscow : UNESCO Institute for Information Technologies in Education, UNESCO Program "Information for All", 2021. – 81 p.
11. Education in numbers: 2022 : a brief statistical collection / L. M. Gokhberg, L. B. Kuzmicheva, O. K. Ozerova, etc.; Nats. research. inst. "Higher School of Economics". – M. : HSE, 2022. – 133 p.
12. Borisenkov, V. Digitalization of education: trends in teacher training / O. Gukalenko, V. Pustovoitov // XIV International Scientific and Practical Conference "State and prospects of agribusiness development – INTERAGROMASH 2021". E3S Web Conf. 2021. vol. 273–12075. DOI: <https://doi.org/10.1051/e3sconf/202127312075> . URL : https://www.e3s-conferences.org/articles/e3sconf/pdf/2021/49/e3sconf_interagromash2021_12075.pdf (accessed : 07.02.2023).
13. Shevtsova, Yu.A. Features of value orientations of students of the humanities cycle // Materials of the international scientific conference "Russia and Slavic peoples in the XIX–XX centuries".– Bryansk: "Obverse", 2020. – 482 p. – P. 352–357.
14. Pustovoitov, V.N. Ideas of constructivist didactics as the basic conditions for the effectiveness of individualization of school education // *Modern education*. 2016. No.4. p. 87-96. 10.7256/2409-8736.2016.4.19868. URL : https://nbpublish.com/library_read_article.php?id=19868 (accessed: 29.01.2023).
15. Shevtsova, Yu. A. Types of Internet addiction characteristic of the youth audience // Development of socio-moral and professional competence of students in the conditions of a holistic educational process / Editorial Board: F.V. Kadol (ed.) [et al.]. Gomel: Publishing House "Francisk Skorina Gomel State University", 2021. – 126 p. – P. 114–117.
16. Pustovoitov, V. N. Methodological principles of teacher training for educational activities in the conditions of digitalization of the educational space / V. N. Pustovoitov // *Modern high-tech technologies*. 2021. № 3. P. 177–181. URL : <http://www.top-technologies.ru/ru/article/view?id=38552> (date of application : 1.02.2023).

17. Gukalenko, O. V. Socio-educational space of pedagogical education: the experience of formation and design of the future / S.V. Ivanova, N.L. Selivanova, V.N. Pustovoitov // Pedagogical education in modern Russia: strategic development guidelines : monograph / Southern Federal University ; scientific editor Yu. P. Zinchenko. – Rostov-on-Don ; Taganrog : Southern Federal University Press, 2020. – 612 p. – p.192-215.

18. Pustovoitov, V.N. Conceptual model of teacher training for educational work in the conditions of informatization of education // Higher education in the first quarter of the XXI century: regional and global trends: a collective monograph / ed. by A.Y. Nagornova. – Ulyanovsk: Zebra, 2022. – 523 p

19. Gukalenko, O.V. Ensuring information security of youth in the modern educational space / V.N. Pustovoitov // Domestic and foreign pedagogy. 2019. Vol. 2. No. 2 (64). pp. 117–131.

20. Khlebnikova, M.A. Model of formation of competence of information security of teachers in the process of professional development / I.G. Dolinina // The world of science. Pedagogy and psychology. 2020. No. 3. URL : <https://mir-nauki.com/PDF/65PDMN320.pdf> (date of application : 30.01.2023).

21. Sergeev, A.N. Formation of ICT competence of a teacher in the process of professional training of future teachers // Proceedings of the Volgograd State Pedagogical University. 2015. No. 9-10 (104).) P. 22–26.

22. Lomos, Catalina and Luiten, J. and Tick, Sabina. (2023). Introduction of ICT into classroom practice: what else is important besides the ICT infrastructure?. Large-scale assessments in the field of education. 11. 1. 10.1186/s40536-022-00144-6.

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**PSYCHOLOGICAL AND PEDAGOGICAL SUPPORT
OF THE PROCESS OF FORMATION OF GENDER IDENTITY
OF ADOLESCENTS IN THE SYSTEM OF WORK
OF THE SCHOOL PSYCHOLOGICAL SERVICE**

The article examines the possibilities of school psychological service as a factor determining the process of formation of gender identity in adolescence. One of the directions of this work is the development and implementation of a program of psychological and pedagogical support for the process of gender identity formation. The article analyzes the results of an experimental study of gender attitudes of adolescents, the purpose of which was to determine the effectiveness of the program to support the process of formation of gender identity in adolescents, implemented in the conditions of the school psychological service.

The process of supervision is the basis of the professional activity of school teachers and psychologists, focused on creating conditions (pedagogical, psychological, social) for successful learning and development of each child in situations of school interaction [1]. Thus, psychological and pedagogical support can be characterized as a multi-level interaction of subjects of the educational process aimed at solving urgent problems of a specific educational environment and the personality of students in accordance with age and individual characteristics.

Considering the fact that the school is one of the most important institutions of socialization, under the influence of which the child learns the elements of culture, social norms and values, that are accepted in society, the current direction in the pedagogical process in general and in the work of the school psychological service in particular becomes the support of the process of developing the gender identity of students, creating conditions, contributing to the formation of flexible life strategies, the realization of personal potential, to reveal the individuality and self-actualization of the

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