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Methodology For Improving The Professional Training Of Future Education Teachers Through Digital Technologies

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Abstract: This article analyzes the theoretical and practical aspects, the main directions and tools of the methodology of improving the professional training of future teachers of education with the help of digital technologies. In the article, the method of organizing educational subjects, the importance and effectiveness of digital technologies in today's educational process, the possibilities of using digital technologies in the application of educational methods are widely disclosed. Also, in the article, the analysis of the scientific and analytical views and opinions of the pedagogic scientists of our republic and abroad on the subject is also mentioned.

Key words: education, digital education, technology, methodology, tool, pedagogue, audience, competence, professional training, opportunity.

Introduction. Digital education is an educational practice that helps the educational process and leads to tangible results. It serves not only to continue the educational process through digital educational tools, but also to further improve the quality and effectiveness of education. [9, 67 p] The introduction of digital education into the educational process is carried out based on the use of information technologies. Information and communication technologies are one of the main mechanisms of the innovative activity of a primary school teacher. They allow the teacher to manage information, use it, and also disseminate knowledge in all areas of human activity. In the information age, the main task in the process of forming the innovative capabilities of the state falls on teachers. Such an important task can only be solved by a teacher who has mastered modern pedagogical and information technologies, constantly works on himself, improves his knowledge, skills and qualifications, and approaches his work creatively.

"It is necessary to further improve the educational process, higher education curricula and programs through the widespread introduction of new pedagogical technologies and teaching methods, the qualitative renewal of the magistracy scientific and educational process, and the introduction of modern organizational forms" [1].

Improving the professional training of future teachers of education through digital technologies depends on effective pedagogical conditions.

Analysis of the literature on the topic. International studies have shown that for more than twenty years, the introduction of technologies in classrooms has been yielding the expected results in terms of improving the quality of teaching processes.

The intellectual efficiency of a person who skillfully uses digital technologies and tools in his work increases significantly. According to Kozlova N.Sh., today the computer is becoming the first universal mass tool for working with all types of information[7, 56-b]. Modern computer programs allow working with images, sounds, video materials and texts, calculations, information

models of various objects, etc. in a new way. Many scientists have highlighted digital technologies in education as a way to organize a modern educational environment based on digital and information and communication technologies. For example: Burtsev D.S., Gavrilyuk E.S., Shaugaraeva D.I. Many scholars, such as [6, 132-b], have presented the problems, solutions, and expected results of introducing digital and information and communication technologies into the educational process.

The theoretical foundations of the digitization of higher education can be seen in the works of many researchers. For example: E.M. Egorova A.A. Verbitsky, N.V. Shamova and others. Strasser T. noted that "Analysis of the capabilities of digital technologies allows us to identify features that will serve as the basis for developing fundamentally new approaches to organizing the training process and developing didactic foundations for their inclusion in the educational process" [4, 102-b]. In general, based on the research conducted by the above scientists, it can be said that the active penetration of digital technologies into all aspects of human life requires the training of appropriate specialists, and this, in turn, leads to positive changes in the education system. The principle of professional and methodological training plays an important role in the training of qualified specialists in higher educational institutions. Pedagogical scientists who studied this principle include V.A. Sukhomlinsky, V.P. Bespalko V.A. Slastenin, I.Ya. Lerner, A.K. Markova, E.F. Zeer, N.N. Shakhmatova V.V. Kraevsky, I.A. Zimnyaya, A.V. Barannikov, V.A. Adolf, M.V. Dolgih, A.R. Khairullin[8, 480-b] were engaged in pedagogical scientists. Among the scientists of Uzbekistan, the issue of forming knowledge and skills of future teachers, training qualified personnel was analyzed scientifically and methodologically by U. Tolipov, N. Sayidahmedov, F. Yuzlikayev, N. Muslimov, O. Koysinov, D. Himmataliyev, B. Rahimov, M. Urazova, Sh. Urakov, N. Niyazova and others in their scientific research [3, 23-b].

Professional-methodical training and professional orientation are understood as a system of needs, interests and regulations that express a person's attitude to his future profession. V. Kuzmina and V.A. Slastenin in their works study the problems of professional-methodical training in relation to pedagogical specialties [8, 35-b].

Research methodology. Education is an activity aimed at raising the younger generation to adulthood in all respects, forming social consciousness and behavior in it, aimed at forming the mental, physical, moral, spiritual qualities of a person, and is a process of forming the characteristics necessary for a person to live in society. Education is aimed at forming a person and develops on the basis of values that ensure the existence of a person and society. Education is not only a process carried out in the family, school, children's and youth organizations, but also includes the ideology, the leading ideas of which are instilled through the mass media, newspapers and magazines.[3, 23-b]

As the President of our country Sh.M. Mirziyev noted, "We consider it our primary task to improve the activities of all links of the education and upbringing system in accordance with the requirements of today's times" [2]

The subject of education was introduced in secondary educational institutions at the initiative of the President of the Republic of Uzbekistan from the 2020-2021 academic year. As part of the Concept of Continuous Spiritual Education, this subject aims to instill in students the idea of "From National Revival to National Upliftment", prepare them for a successful social life, and form such qualities as an active civic position, responsibility, obligation, legal awareness and culture, a deep worldview, healthy faith, enlightenment, and tolerance. The first condition for improving the professional training of future teachers of education using digital technologies is the development of educational goals for working in a digital educational environment. The future teacher of the

subject "Education" includes studying the main educational normative documents (curriculum, subject program, modules), passing practical courses, and mastering scientific research work. Then the goal of the educational professional activity is determined. Through the educational goals, the requirements for professional qualities in improving the professional training of teachers of education using digital technologies are developed. The goals are achieved by solving a number of the following tasks.

- formation of pedagogical techniques; - planning and analysis of the activities of the digital educational environment; - activation of the educational process; - the need to work in a digital educational environment even after graduating from higher educational institutions;
- continuous improvement of one's professional skills to work in a digital educational environment;
- formation of important professional qualities such as self-assessment training.

The improvement of the professional training of future teachers of education through digital technologies can be considered as an information model. There should be a methodological approach to developing such a model. In the areas of "Primary Education", lectures, seminars, laboratories, independent work, research, practical classes and extracurricular activities are types of training, and the correct selection of group, small group, pair and individual work forms is of great importance in conducting these trainings. [10, 33-b].

We will focus on how to organize classes in a digital educational environment. 1. Online lectures. Conducting lectures in the form of “online” lectures allows you to increase the volume of theoretical educational material, involve scientists from other universities, freely determine the time of the lecture, and present presentations and illustrations. Lectures can be posted on the platform in the form of video files.

2. Seminars, practical classes and laboratory classes can be held in the form of “online” courses, “online” trainings, webinars, “online” laboratories. Also, conducting laboratory classes through virtual stands can give students a realistic idea of complex technological objects and processes.

3. Independent work is the process of completing any tasks remotely with methodological assistance in the form of advice. Tasks can be completed independently by the student without the help of a teacher.

To increase the activity of students in independent work, it is necessary to use the following teaching methods and forms. [11, 122-b]

- Introduction of “On-line” learning through the special platform Moodle;
- Working with Google, HTMIS, On-line Documents;
- Working with social networks (Telegram, Instagram, Face book);
- On-line survey (Voice, test);
- Working with interactive graphs and tables. - Working with online monitoring platforms. - Working with educational sites.

Student research work is a form of education that forms initial qualifications. The formation of scientific research skills in students is carried out in the following activities:

- scientific practical conferences, seminars and round tables.
- Collaborative implementation of projects in small groups, laboratory exercises, group scientific research.
- Completion of term papers, abstracts, lectures, and creative assignments. Digitalization through educational forms of learning requires changes in the educational process. In the context of digitization, training future teachers of the subject "Education" to work in a digital educational environment will raise education to a new level of quality.

In the context of digitization, improving the professional training of future teachers of the subject of education using digital technologies is carried out through the following technologies: project-based, problem-based, active, electronic and distance learning technologies, among others.

Analysis and results. The professional skills of a teacher in information and communication technologies include:

a) awareness of the involvement of the education system in global information processes;

b) readiness to master effective methods of access to an almost unlimited amount of information and analytical processing of this information;

d) striving to form and develop personal creative qualities that allow the formation of pedagogical ideas in a modern information environment in order to obtain innovative pedagogical results, as well as the creation of a unique information environment;

e) readiness for the joint development of scientific and social experience, for reflection and self-reflection together with all subjects of information interaction;

f) mastering the culture of obtaining, selecting, storing, reproducing, presenting, transmitting and integrating information;

g) readiness to use modern interactive telecommunication technologies as an important area of professional growth in a constantly changing information society, in conditions of continuous education; h) the ability to model and design information and educational environments and predict the results of one's professional activities. [11, 123-b]

The design of the purpose and content of educational and professional activities in a digital educational environment is based on the following principles.

1. Establishing a connection between the subject of study and science in the training of teachers in a scientific-digital educational environment.

The following requirements are set:

-Introducing students to the concepts and scientific evidence of the theory and laws of pedagogical science in a digital educational environment;

-Study of technologies and methods of pedagogical science in a digital educational environment;

-Use of scientific evidence, laws and theories in solving professional problems in a digital educational environment.

-Work with online programs, search for and select the necessary information, analyze literature, prepare presentations and scientific articles.

2. Integrity. Ensuring the integration of theory and practice in a digital educational environment. The following requirements must be met.

-Formulate the issue of solving professional problems in a digital educational environment.

-Ensure readiness for professional activity in a digital educational environment according to the rhythm of implementation.

-Introduce new requirements to the education system in a digital educational environment.

-Self-development of future teachers of the subject "Education" in the implementation of professional pedagogical activities in a digital educational environment.

3.Organize a complex impact on the individual in the educational process through the creation of a digital educational environment. The following requirements must be met:

- develop comprehensive measures to improve the professional training of future teachers of education using digital technologies in the context of digitalization.

- complex activities carried out with students in class and extracurricular activities.

- complex activities to determine the level of improvement of professional training of future teachers of education using digital technologies in the context of digitalization.

4. Systematicity. Establishing a connection between pedagogical theory and practice in the context of working in a digital educational environment. This requires a description of the logical sequence of the structure of theoretical and practical educational material, and the establishment of integration between theoretical and practical exercises.
5. Professional pedagogical activity. This principle includes diagnostics, diagnosis, monitoring, design, programming. [6, 56-b]
In the context of digitization, the third condition is also important in improving the professional training of future teachers of education using digital technologies. This is the assessment of the improvement of the professional training of future teachers of education using digital technologies in the context of digitization.
In order to determine the level of improvement of the professional training of future teachers of education using digital technologies in the context of digitization, assessment criteria have been developed. These criteria are divided into the following motivational-need, gnostic, process and self-assessment groups.

Conclusions and suggestions. Our research has studied the state of the problems of improving the professional training of future teachers of education in the conditions of digitization using digital technologies, and substantiated the relevance of the chosen topic in pedagogical theory and practice, as well as in the field of training students in education today.

In our opinion, important professional qualities for working in a digital educational environment are a complex set of qualities necessary for pedagogical activity in a digital educational environment. Thus, we have identified three pedagogical conditions for improving the professional training of future teachers of education in the conditions of digitization using digital technologies.

1. Designing the purpose and content of educational and professional activities for improving the professional training of future teachers of education in the conditions of digitization using digital technologies.

2. To organize the actions of teachers and students in improving the professional training of future teachers of education in the context of digitalization using digital technologies.

3. To evaluate the results of improving the professional training of future teachers of education in the context of digitalization using digital technologies.

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