APPLICATION OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE CONDITIONS OF THE PRACTICE-ORIENTED APPROACH OF PROFESSIONAL TRAINING OF FUTURE TEACHERS OF ELEMENTARY CLASSES

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ABSTRACT

The article reveals the use of information and communication technologies in the context of a practice-oriented approach to the professional training of future primary school teachers. The role of information and communication technologies in optimizing the educational process and improving the quality of education is considered.

Keywords: innovation, technology, approach, optimization, practice-orientedness, electronic resources, computer technology.

INTRODUCTION

The key trends in the development of a post-industrial society are innovation and sustainable development. The education system, as one of the most important social spheres of society, must respond flexibly to social orders and strive to create an innovative educational environment. The education system has always and everywhere determined the basis for radical changes and innovations in the social life of society. In particular, the Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No. DP-4947 "On the Strategy for the Further Development of the Republic of Uzbekistan" provides for the development of education and science in accordance with clause 4.4. IV directions on the priorities of social development. It sets tasks such as taking targeted measures to strengthen the material and technical base of educational institutions by equipping educational institutions with modern teaching and laboratory equipment, computers and teaching aids. In accordance with the Decrees of the President of the Republic of Uzbekistan dated October 8, 2019 No. DP-5847 "On approval of the Concept for the development of the higher education system of the Republic of Uzbekistan until 2030", the Republic of Uzbekistan until 2030 faces such tasks as becoming one of the leading countries in terms of quality education, improvement of teaching methods, the gradual introduction of the principles of individualization in the educational process, the introduction of modern information and communication technologies and innovative projects in public education.

The difficult conditions of the pandemic posed a challenge to the teacher education system and led to the rapid transition of education to online mode, which has significant differences from the usual educational process. At the same time, a complete rejection of the traditional teaching in classrooms, according to researchers and practitioners, is impossible, as it will inevitably lead to a decrease in the quality of education. This is especially noticeable in such a practice-oriented area as teacher training, where a large amount of real pedagogical practice is required throughout the entire period of training. In this regard, blended learning as the integration of

online and offline formats is of particular relevance for teacher education. The use of blended learning in the process of training teachers actualizes the implementation of educational programs of higher education, differentiation of methodological support for the learning process, formation of the readiness of the teaching staff to work in blended learning. The development of scientific and methodological support for practice-oriented training of teachers in blended learning conditions will significantly increase the effectiveness of the educational process with significant savings in resources (human, material, technological, etc.).

MATERIAL AND METHODS

The issues of improving the training of teachers, the search for new ways to solve the problems of vocational education made it necessary to study the possibilities of organizing the educational process in various formats. One of these methods is blended learning, which involves a combination of traditional forms of classroom learning with elements of e-learning, which uses special information technologies such as computer graphics, audio and video, interactive elements, etc. The blended learning process is a sequence of phases of traditional and e-learning that alternate over time. The applied orientation of the process of training future teachers should ensure, first of all, the acquisition of skills and experience for the formation of competencies that ensure the competitiveness of future teachers. Practice-oriented learning operates with a system of means, forms, methods that promote the activation of educational activities of students by including them in real professional conditions. The result of such training is, in particular, the readiness of the future teacher for the selection and use of modern pedagogical technologies, his maximum adaptation to professional requirements, the development of professionally significant abilities, skills and abilities, as well as a clear understanding of how these skills are used in professional activities.

To ensure the practice-orientedness of the learning process, an appropriate methodological support is necessary, which is specific and more resource-intensive in a blended learning environment. As noted in a number of studies, it takes an average of 6-9 months to develop an online course, and the skills of a teacher on an online platform are formed during the first two launches of the course. In this regard, it is necessary to assist the teacher in the development of educational and methodological materials, as well as in the implementation of a new format of the educational process.

In the process of research, such methods were used as comparative-comparative study and analysis of political, philosophical, sociological, psychological and pedagogical literature on the subject; study of advanced teaching experience in higher educational institutions; sociometric methods (questionnaire, interview, conversation); pedagogical experiment; monitoring; mathematical and statistical analysis of the results.

RESULTS

Electronic educational resources and information systems form a unified environment for personality formation in order to ensure equal opportunities for students in obtaining knowledge at the level of modern requirements and standards. In such an environment, a

person is trained and educated who is able to quickly adapt to social changes, optimally build their life activities and respond more flexibly to the needs of the market and time.

The specificity of the creation and use of interactive computer modules of electronic educational and methodological complexes (EEMC) is due to the priority of personality-oriented, practice-oriented and competence-based models of education in the modern socio-cultural situation. Interactive computer modules of the EEMC for academic disciplines become components of the information and educational environment, which ensure the formation of metasubject and subject competencies in students, subject to the following theoretical and pedagogical conditions:

1) the concept of "interactive computer module" is pedagogically interpreted on the basis of generalization of interdisciplinary scientific approaches;

2) the features, features of the structure and composition of the interactive computer module EEMC in the conditions of the modern information and educational environment have been analyzed;

3) the development of interactive computer modules EEMC was carried out in accordance with didactic, technical-technological and design-ergonomic requirements;

4) modeling the process of using interactive computer modules EEMC contributes to the definition of clear educational results.

Practice-oriented learning presupposes the ability of the future teacher to apply theoretical knowledge in a real environment even before the start of independent professional activity, the accumulation of his individual portfolio, which demonstrates the formation of this ability. The result of such training is not just the sum of knowledge and skills, but the readiness for the effective organization of the educational activities of students (including training, development and education), the formation of research and reflexive competencies that provide the possibility of restructuring their own activities.

DISCUSSION

The specificity of the professional training of teachers is presented in the studies of V.A. Bolotov, A.I. Zhuk, V.S. Lednev, E.V. Markova, A.Kh. Makhmudov, N.A. Muslimov, S.I. Nevdakh, A.V. Poznyak, V.A. Slastenin, A.V. Torkhova, M.B. Urazova, A.A. Shapovalova, etc.

The issues of practice-oriented professional training are considered in the works of L.M. Vorobyova, O. L. Zhuk, G.N. Tolkachyova, F.G. Yalalov, where the authors note the need for active involvement of the student in all types of practice-oriented activities. I. G. Minervin, S. V. Abramova, E. N. Boyarov, A. S. Lomov examined the theoretical foundations of practice-oriented training of specialists, identified the pedagogical conditions for its implementation.

The study of various aspects of practice-oriented training of specialists in the organization of blended learning is disclosed in the works of scientists: L.V. Vedernikova, S.V. Abramova, E.N. Boyarov, Yu.I. Kapustin, N.V. Lomonosova, M.N. Mokhova, M.S. Orlova, P.V. Stankevich, D. Akgündüz, O. Akınoğlu, C.R. Graham, G. M. Almerico, Baker Oam, Shayne.

The development of scientific and methodological support for practice-oriented training of teachers in blended learning conditions will allow teaching students of pedagogical specialties more effectively, significantly reduce the costs of organizing the educational process while

improving its quality and strengthening the practice-oriented component in the Republic of Uzbekistan.

In blended learning, both types of learning are equally important. Online learning provides learners with a certain freedom: the ability to control the pace, time, and place of learning by themselves. This allows students to develop planning skills, self-control and self-regulation. Offline learning varies depending on the needs of students and involves active forms of work in the classroom. The presence of two types of training requires the development of appropriate scientific and methodological support.

If for the organization of offline learning the development of teaching materials does not cause any particular difficulties for the teacher, then for the organization of online learning he will need certain competencies. Moreover, the task is complicated by the need to ensure the practice-oriented nature of teaching students in both formats of organizing the educational process.

The globalization of the educational space contributes to the emergence of large educational platforms (Open Education, Stepik, Universarium, Hemis, and Moodle), on which universities place their e-courses for distance education. The analysis of the developed courses in the field of training in the specialty "Primary education" makes it possible to note the need to include interactive computer modules, animated models, simulators, etc. into the electronic educational and methodological complexes (EEMC). When creating them, it is necessary to rely on the principles of visualization and implement interactivity, the use of special graphic and animation applications and a unified form of layout of electronic content intended for its storage and distribution in information and educational environments is required.

The use of interactive computer modules as part of the EEMC allows to activate the cognitive activity of students through visualization of the studied material and a combination of logical and figurative methods of assimilating information and ensures the development of the necessary competencies in students. The inclusion of interactive computer modules in the EEMC will allow realizing the principle of visibility by demonstrating the studied phenomena and processes and optimizing the educational process by transferring its center of gravity to the independent work of students and enhancing their activities.

Submission of content in electronic form will save financial resources for the publication of printed manuals, keep the resources up to date and provide students with the necessary educational materials in a timely manner through their placement on Internet portals and in distance learning systems.

CONCLUSION

Thus, we can conclude that the use of electronic resources in the educational process leads to the need to master new types of information and communication activities of all participants in the educational process, to revise the paradigm of educational interaction between participants in the educational process, to improve and modify the forms and methods of teaching. Information and communication technologies play a key role in optimizing the educational process and improving the quality of higher education.

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