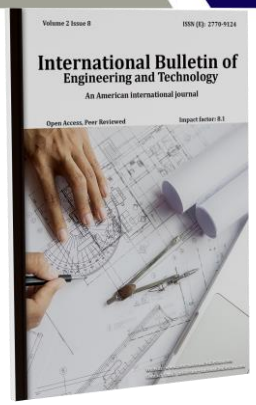

MODEL OF DEVELOPMENT OF METHODOLOGICAL PREPARATION OF FUTURE IT TEACHERS BASED ON THE INTEGRATION OF PEDAGOGICAL AND INFORMATION TECHNOLOGIES

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Annotation
In this article, a complex integrative process that includes the methods of problem analysis and planning, evaluation of the solution to the problem, and the development of methodological training of future teachers based on the integration of pedagogical and information technologies creation of the model and training of a professional and pedagogically prepared competent informatics teacher on the basis of integrative knowledge and its existing conditions were researched.
Key words: pedagogue, methodology, integration, synchronous method, information technologies, pedagogical skills, variation, reproduction.

INTRODUCTION.

Today, the higher pedagogical education system is tasked with training teachers with innovative methodological training. Because the teacher should acquire the experience of learning, forming and developing the psychological and physiological characteristics of the students. It is known that the development of the methodology for improving the methodological preparation of the future teacher in the educational process occupies a prominent place. For this, teachers are required to meet modern requirements, think independently, have intellectual skills, deep knowledge and scientific worldview, and thorough methodical training. Active, group, game, figurative, practical, problem-oriented and other forms and methods of education are necessary. Development of methodical training of future teachers based on these directions and methods, integrating it with knowledge of information technologies gives an opportunity to interest the student in the modern educational environment, to give him the necessary knowledge and skills.

Analysis of literature on the topic.

Pedagogical scientist B.Kh. Rakhimov said in his research: "First, the teacher puts a problem in front of the students and explains its definition, and the students look for guidance to solve the problem. Then the teacher sets the students the task of defining the problem independently, and guides them to solve it. After that, the teacher does not point to the problem, but teaches the students to independently analyze, then describe, search for solutions and opportunities" [1] - he says.

Pedagogical scientist M.Kh.Baybaeva distinguishes the following types of independent work in her research: independent work according to the sources of knowledge and the type of teacher supervision; independent work according to the components of the educational process; independent work according to the level of independence and acmeological approach; independent work according to the nature of cognitive activity (reproductive or creative) [2]. Research scientist I. Rozina stated that "internetization of computer science

education" is the use of Web 2.0/3.0 services in the educational process[3]. The diversity of Web 2.0/3.0 services provides an opportunity to choose one of the many options for realizing computer science education with the help of these technologies. Thus, today, the formation of network pedagogical communities is becoming extremely urgent. E.Patarakin[4], M.Nimatulaev[5], T.Vezirov[6] have given a number of classifications regarding the use of Web-technologies in the educational process.

Analysis and results.

Based on scientific research and practical pedagogical experience, a model for improving the methodology of training future informatics teachers based on an integrative approach in the e-learning environment was developed. In the goal determination block of the model, the goal of training competitive informatics teachers according to social demand was set, and tasks were determined based on the goal.

In the organizational unit, the teacher prepares educational materials for the organization of an electronic learning environment in remote and non-distance forms, using an educational platform (Moodle, Coursera, etc.) in a distance form, Zoom, BigBlueButton, Webinar and other websites in a synchronous manner, in the case of non-distance availability of educational and methodological materials representing integration in each pedagogical process to use electronic educational resources (Macromedia Flash 8, AutoPlay Media Studio 8, Movavi Video Editor Plus, Bandicam, Audacity, Turbo Site, Ispring, Hote Potatoe, etc.) and an integrative approach, its use will be planned.

In the pedagogical activity block, the pedagogical process is organized in an electronic learning environment (LMS, Moodle, CLMS, LP, etc.), the teacher communicates with students synchronously (via Zoom, BigBlueButton, Webinar, Chat, e-mail, etc.), as a result of which quality higher education implementation, in which the main focus is on the use of an integrative approach in the teaching of informatics by future teachers in their future pedagogical activities, as a result of learning the methodology of analyzing and using integrative knowledge, improving the methodology of teacher training in the e-learning environment, improving integrative, metasubjective, design, research, and innovative competence of the future teacher .

Based on the above goal and task, the result block summarizes the results of the work carried out in the educational organization and pedagogical activity block. It reflects the fact that the professional preparation of the future informatics teacher is mobile (special professional competence), partially searching (basic professional competence), variable (initial professional competence), reproductive (not competent) or high, medium, lower, low levels, and finally, electronic it leads to the training of a professional and pedagogically prepared competent informatics teacher based on integrative knowledge using the educational environment. The stages of planning are preparation (determining the purpose of the lesson, content, form, method, tools and control method), project preparation (lesson development and technological map preparation), project implementation, implementation (conducting the lesson), final (motivation of students), conclusion and At the stages of giving recommendations (identifying one's own activities, achievements and shortcomings, correcting), attention was paid to what the activities of future informatics teachers are, and ways to convey them to students.

In order for the future informatics teacher to carry out innovative activities in the e-learning environment: to take into account the diversity and change of ideas and thoughts over time, to

be able to quickly accept news (perceptual ability), to apply it in practice, to develop creativity, to analyze oneself and objective evaluation (reflexivity), fair resolution of the conflict that occurs (tolerance), control of one's emotional state (toward the leader, student, parents), sincerity, sympathy for others (empathy), implement innovation, and come to one's own conclusions and decisions the formation of possession was founded.

In order to improve the methodological training of future informatics teachers, it is necessary to develop their "Competence to work with information" and thereby ensure the integration of information technology, to develop the skills of correct use of information and to use existing information sources (Internet, television, radio (audio-video recording), telephone, computer, electronic mail, etc.) to be able to use; to be able to search for, sort, process, transfer, store, secure and use the necessary information from the media, and observe media culture in using it; to be able to create a database, to be able to select the main ones and to be able to analyze them; Competences to work with documents encountered in daily activities, the information environment in the educational institution serves to increase the efficiency of the educational process.

Conclusions and suggestions.

As a conclusion, it can be said that in order to increase the methodological training of future teachers, it is necessary to increase their theoretical knowledge about the characteristics of methods and methods that are important in the organization of education, the situations in which they are permissible to use, to improve their pedagogical skills and to improve their technical training, and to develop the skills to use the opportunities of information technology in their place. will be

The main goal of the system of developing methodical training of future informatics teachers with the help of pedagogical and information technologies is to develop students' thinking and to form thinking activity styles in them. It also aims to achieve the following objectives:

• Mastering the knowledge that forms the basis of scientific ideas on information, information processes, systems, technologies and models;

• Mastering the skills of working with various media using computers and other information and communication technologies, organizing scientific activities and planning their results;

• Be responsible for information, taking into account the legal and ethical aspects of information dissemination; selective attitude to received scientific information.

Advantages of using information technologies in pedagogical activity:

1. Acceleration and individualization of pedagogical activity;

2. Expansion of information flows when using the Internet.

3. Combining pedagogical activities with computer and Internet information allows to conduct part of the lessons with the help of information technologies, which makes the pedagogical process more interesting, diverse and intensive.

4. The use of information technologies (computer) allows the teacher to clearly show the level of learning of the materials studied by all students in a short period of time and to correct it in time. At the same time, it is possible to determine the level of difficulty of a particular task.

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