THE PROCESS OF FORMING THE ICT COMPETENCE OF A FUTURE PRIMARY SCHOOL TEACHERS

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Abstract: Creation of pedagogical concept is a creative and abstract process, since in the pedagogical science does not have clear rules for working on a fundamental idea. As is known, the author's conceptual idea cannot be repeated in practice. Working on the theoretical and methodological as the basis of the model, we relied on cultural, competency-based, systemic and activity approaches in education.

Keywords: methodology, information, competence, technology, competence, mathematics.

Research methods. In order to form ICT competence for future primary school teachers, we have developed an educational and methodological complex of discipline "Theoretical Foundations of Elementary Mathematics". We assume that the emphasis on sign-symbolic and algorithmic activity in solving mathematical problems contributes to the formation the ability to analyze, synthesize and visualize information, which has a positive impact on the formation of ICT competence. The process of forming the ICT competence of a future primary school teacher is multicomponent and represents a multilevel model. Based on the works of G.V. Sukhodolsky, A.N. Dakhina, V.M. Mikheev [1], devoted to the modeling method in pedagogical science, having studied the experience of existing educational models, such as modern educational technologies - "System of educational information", "System of creative tasks", "Modeling", "Educational research", "Scientific research", "Design of the environment", "Construction" (V.A. Bukhvalov), S. Papert's system "Use of computers in the educational process", the technology of complete assimilation (B. Bloom, J. Carroll), methodical system of intensive learning (V.F. Shatalov) [2], we can state that one of the basic principles of pedagogical modeling is consistency, the essence of which is to introduce additional submodels into the system. Today, the question of the effectiveness of pedagogical models. As A.N. Dahin: "For deductive models that accurately describe the behavior of a system of any nature, there is no complete and final information about this system" [3]. That is why the justification of pedagogical validity is an important part of pedagogical modeling.

As a result of pedagogical design, we have developed a dynamic model1, designed to study a multidimensional, bearing stochastic character, the object of pedagogical reality (see figure). Applying the principle of fragmentary-subject modeling, we relied on the following aspects of pedagogical reality: the creation of a target model, the application of an integrated approach to modeling, the conceptual, criterial, and quantitative justification of the model [5].

The purpose of the discipline "Theoretical Foundations of Elementary Mathematics" has a conceptual framework that implies the formation of readiness students to perform labor functions. Pragmatic goal defined unified philosophical origins of scientific knowledge, in particular mathematics and informatics. According to Yu.V. Viktorova, mathematical problems contribute to the development of certain coding styles (verbal-speech, visual, sensory-emotional, subject-practical) [1], which imply the ability to process, visualize information, implement information models, transmit information of associative sense, which is a sufficient basis for the formation of the components of the ICT competence of the future primary school teacher identified by us. classes [5]. The presented model solves the following didactic tasks: studying the requirements of the professional standard; studying the requirements of the Federal State Educational Standard of HE. The social level of the sphere of educational services:

1. Studying the requirements of employers in the region.
2. Studying the results of measuring the level of mathematical preparation training of future primary school teachers.
3. Studying the pedagogical experience of leading primary school teachers.

The goal is to develop the ICT competence of future primary school teachers. the object of cognitive activity (the future primary school teacher) and positively influencing the deepening of ideas about the symbolic language, methods of information modeling, sign-symbolic ways of presenting information;

– axiological, aimed at understanding the connection between mathematics and informatics with a system of value priorities of the information society, deepening ideas about the role of symbolic language, information modeling in the knowledge of the world, intellectual and social and cultural development;

– praxeological, aimed at the formation of a system of educational and methodological skills, skills for solving various methodological and pedagogical problems that meet the requirements of society for mathematical and informational training at school;

– professional and personal, focused on the ability to form a comfort zone in the course of professional activities, use, develop and correct such psychological components as professional memory, attention, thinking, working capacity, emotionality, a set of moral qualities;

– communicative, focused on the ability to use mathematical language as a Means of scientific, technical, professional and pedagogical communication, the necessary socio-cultural characteristics. Traditionally, the content of a mathematics course for future teacher's elementary general education includes a system of actually necessary discipline knowledge. This is definitely the foundation of high level qualifications. Results and discussions. The implementation of the project is reflected in the technological block and is based on the creation of an educational environment based on the principles of humanization in education. When implementing the course "Theoretical Foundations of Elementary Mathematics", we draw parallels between mathematics and informatics. For example, when studying number systems, we encode information (we encrypt letters using a binary code); when studying relations in mathematics, we must we build a graph, familiarity with this concept helps in decoding information. Having studied the fundamental works in the field of pedagogical technologies studies (V.P. Bespalko, A.M. Novikov, etc.) and the principles of the qualimetric approach in pedagogy, we have defined and filled levels of formation of ICT competence of future primary school teachers: elementary, sufficient, advanced (see table). Beshenkov S.A., Matveeva V.A. Bulletin of RUDN University. Series: Informatization of education. 2020. Vol. 1

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