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INDEPENDENT EDUCATION THE FUTURE IN ACTIVITIES MATHEMATICSDEVELOPMENT OF CREATIVE COMPETENCE OF TEACHERS

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Annotation. *This article, the development of the creative competence of future mathematics teachers in independent educational activities, highlights the content of the use of digital technologies in the process of increasing the opportunities for independent learning of future mathematics teachers in digital education, and also determines the level of effectiveness of experimental results.*

Keywords: *creative competence, talent, motivation, innovation, creativity, critical thinking, problem solving training. student work.*

MUSTAQIL TA'LIM FAOLIYATDAGI KELAJAK MATEMATIKA O'QITUVCHILAR IJODIY KOMPETENTINING RIVOJLANISHI

Annotatsiya. *Ushbu maqolada mustaqil ta'lim faoliyatida bo'lajak matematika o'qituvchilarining ijodiy kompetentligini rivojlantirish bo'lajak matematika o'qituvchilarining raqamli ta'lim sharoitida mustaqil bilim olish imkoniyatlarini oshirish jarayonida raqamli texnologiyalardan foydalanish mazmuni yoritilgan, shuningdek, tajribalar asosida olingan natijalarning samaradorlik darajasi aniqlanadi.*

Kalit so'zlar: *ijodiy kompetentlig iste'dod, motivatsiya, innovatsiya, ijodkorlik, tanqidiy fikrlash, muammolarni hal qilishga o'rgatish. talaba ishi.*

САМОСТОЯТЕЛЬНОЕ ОБРАЗОВАНИЕ БУДУЩЕЕ В ДЕЯТЕЛЬНОСТИ МАТЕМАТИКАРАЗВИТИЕ ТВОРЧЕСКОЙ КОМПЕТЕНТНОСТИ УЧИТЕЛЕЙ

Аннотация. *В данной статье развитие творческой компетентности будущих учителей математики в самостоятельной образовательной деятельности освещается содержание использования цифровых технологий в процессе повышения возможностей самостоятельного обучения будущих учителей математики в условиях цифрового образования, а также определяется уровень эффективности полученных на основе экспериментов результатов.*

Ключевые слова: *творческая компетентность талант, мотивация, инновации, креативность, критическое мышление, обучение решению проблем. студенческая работа.*

INTRODUCTION

Today, according to many foreign experts, it is important to ensure the quality of higher education through an innovative process, encouraging interest in assessing competencies based on a competency-based approach throughout the world.

Independent educational activity includes setting the goal of developing a technology for developing creative competence of future mathematics teachers, identifying the main stages, forms, methods and means of achieving the goal, determining the effectiveness of the results obtained. When characterizing the independent educational activity of future mathematics teachers, it is necessary to take into account the features of the interaction of its subjects, the creation of pedagogical conditions favorable for the implementation of planning, the consistency of individual independent educational activity with the implementation of a creative circle.

We have analyzed the documents regulating the activities of educational institutions. The results of this analysis showed that today in Uzbekistan and abroad the main goal of creating a high-quality education system is a competency-based approach. In recent years, the idea of competence as an integral professional characteristic of a modern person, which is formed in the education system, has become the main topic of discussions and research in the field of pedagogy. In domestic and foreign science, the theoretical foundations of the competency-based approach are discussed and developed, in particular, its conceptual apparatus and application boundaries are clarified. At the same time, it is possible to identify a certain established and well-established conceptual core, which is currently observed in the scientific and pedagogical community in accordance with consensus.

REVIEW OF LITERATURE ON THE TOPIC

Competence is a corresponding stage of thinking based on the ability to quickly solve emerging problems and tasks through the ability to perform practical actions required by the system of concepts. A.V. Khutorskoy defines competence as a set of interconnected aspects of the individual (knowledge, skills and abilities, methods of activity) based on the necessary high-quality productive activity in relation to objects and processes of a certain type [17].

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N.A. Muslimov [16] in his research, paying special attention to the etymological analysis of the concepts of competence and competency, notes: competence is the result of the acquisition by the student of knowledge, skills and abilities necessary for the implementation of didactic activities that have personal and social significance, and the ability to apply them in didactic activities [16].

G.S. Altshuller [15] in his research pays special attention to the development of creativity in early childhood, focusing on solving the problems of creating a free and creative learning environment[15].

RESEARCH METHODOLOGY

To understand the problem of creative competence, it is necessary to analyze the components of the categories "creativity" and "competence". In this regard, the ways of interdependent activity of the individual and creativity, the transformation of education and pedagogy into a creative environment that unites various humanistic philosophical ideas, acquire great importance.

Thus, competence is realized and assessed in practice through professional training of specialists, which is based on the process of mastering knowledge, skills and competencies. This particular stage of activity is proportional to the qualification requirements for the stages of professional, social, psychological and pedagogical training, based on the characteristics of each person[1].

The main condition for the successful implementation of the technology for developing the creative competence of a future mathematics teacher is the presence of a creatively active teacher who is ready to present his or her accumulated experience, or a group of teachers who have united in a creative circle and specialize in one of the mathematical problems. The process of dissemination aimed at transferring to students the results of experience gained in innovative activities

includes the collection, generalization, study and transfer of products of advanced experience in various forms.

In her dissertation, G.A. Asilova [14] summarized the definitions of the concepts of "competence" and "competence" and came to the conclusion that "competence" is the effective application of personal qualities, knowledge, skills and abilities in the process of activity in a certain area; "Competence" is defined as the ability to perform a certain activity that exists and can be developed [14].

Creativity in a broad sense is understood as an active, consistent impact of a subject (individual, social class, society) on an object (the entire environment or a more or less isolated, separate part of it). In the process of this impact, the subject changes the environment around him, creating or discovering something new, previously unseen, unknown, unexplored, strange and fascinating. In the process of creativity, a person not only changes the world, but also discovers himself as a creator, an artist. Creativity realizes the creative and inventive potential of a person. A person creates innovations through creativity, poses and solves various problems, finds unique solutions to them, and sometimes approaches and methods for such solutions. Creative activity reveals the uniqueness and originality of a researcher, creator, scientist [7].

Yu.E. Usarov[13] in his scientific work defined competence as "experience and knowledge in a certain area or direction, manifestation of readiness to perform activities, a person's ability to act successfully in various non-standard situations"[13].

ANALYSIS AND RESULTS

Considering that the process of developing the creative competence of a future mathematics teacher is of a purposeful nature, we will begin the analysis of the content of the reflexive-target component with its target component. Educational goals are specific planned, expected results or target guidelines that must be achieved in the learning process. The educational goal was formulated by the authors of the technology "Reading and Writing in Critical Thinking" scientists B.Z. Vulfov and V.N. Kharkin, Ch. Tomple, K. Meredith and D. Still view the goal of education differently. They believe that the main result of training should be the development of students'

thinking abilities, the ability to independently solve problems, the development of deep and broad knowledge, the introduction of innovative ideas, decision-making and the maximum development of their ability to communicate effectively.[3]

The principle of taxonomy of educational goals was developed by American scientists and implies systematization of educational goals. It is based on the sequence of levels of mastering educational materials. In this case, the task is a step towards achieving the goal. As a system-forming factor, the taxonomy of goals allows us to determine the content of the pedagogical process [8].

A goal is the result of planning an activity. The processes of setting and implementing goals are complex and multifaceted. Having a goal does not automatically lead to the expected and desired result, but it is the goal that helps the teacher and student strive to implement their plans.

The achievement of the set goal is controlled by the subject of educational activity in the process of self-analysis. Let us consider the essence of the concept of "reflection".

"Reflection" - [Latin: Reflexio – to return]. Theoretical work aimed at helping a person understand and comprehend his own actions and their foundations; a special form of knowledge [9].

CONCLUSION AND SUGGESTIONS

Creative competence of future mathematics teachers is a professionally significant skill, developed in independent educational activities, combining critical thinking, reflection, systematic manifestation of creative and productive activity, taking into account the age characteristics and capabilities of the individual, new types of activities, educational situations that contribute to its development.

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