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PROBLEMS OF IMPROVING MATHEMATICAL KNOWLEDGE IN THE CONTINUOUS EDUCATION SYSTEM

Komolova Gulhayo Shukirillo kizi
Doctoral Student of Andijan Mechanical Engineering Institute
Email:gulhayokomolova1990@mail.ru

Abstract:

The article presents the problems of mathematical knowledge and its improvement in the continuous education system, as well as the problems and solutions of mathematics and its teaching using modern pedagogical technologies.

Keywords

Continuing education, practical, technology, resource, internet, modern technology, problem.

Introduction

Designing the process of educational work on the basis of modern pedagogical and information and communication technologies is a factor of educational efficiency. Even though the educational system of our country is carrying out effective work on creating projects based on pedagogical technologies and organizing the educational process, scientifically based models and instructions for teaching mathematics are not sufficient.Despite the detailed coverage of the form of educational training design and the content of the concept of "pedagogical technology" in most sources, the issue of creating educational process projects in mathematics has not been resolved. Therefore, it is worth noting that the stages of continuous education, in particular, the creation of projects of the educational process of mathematics in the higher education system, need to be researched as an urgent pedagogical problem.

LITERATURE ANALYSIS AND METHODS.

In this article, during the study of current educational technologies, the following was determined:

I. Creation of educational process projects based on the principles of modern pedagogical technology, the need for sources, special literature, methodical developments and examples of the essence, theoretical and practical foundations of educational technology;

ll. The importance of establishing a system of training and popularizing the experience of professors and teachers of higher education institutions, especially specialists in the field of mathematics teaching projects;

III. A positive solution to the problem of material and technical support in the design and organization of education;

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IV. Focusing on the essence of the theory of creating projects of the educational process through mass media, the organization of analytical presentations about the achievements and experiences in the creation and teaching of the projects of mathematics subjects;
V. High-level organization of large-scale actions aimed at promoting the creation of the theory of modern pedagogical technologies and its scientific-practical foundations and the educational process projects of mathematics within the capabilities of international donor organizations related to education.
VI. In view of the narrowness of the scope of scientific research aimed at revealing the theoretical and practical foundations of the introduction of pedagogical technologies in the organization of mathematics education in higher education institutions, the creation of special instructions and recommendations for designing and teaching.
That the above-mentioned problems have a positive solution
provision guarantees the success of effective application of modern pedagogical technologies to the process of teaching mathematics in higher educational institutions.
Problems of improving mathematical knowledge in the system of continuous education are really important issues. In this regard, we can consider several important aspects:

1. Motivation and Interest

- * Lack of practical relevance: Many students do not understand how mathematics can be used in real life, which reduces their interest.
- * Lack of interesting teaching materials: Continuing education may lack practical, interesting and modern mathematics teaching materials.

2. Educational process:

- * Teacher Qualifications: Some teachers may have difficulty applying modern teaching methods.
- * Lack of learning resources: Continuing education may lack math learning resources such as textbooks, practice exercises, and online platforms.
- * Different levels of students: In continuing education, students can have different levels of mathematical knowledge, which can create challenges for teachers.

3. Other problems:

- * Lack of time: Many students find it difficult to find time for mathematics due to work, family and other commitments.
- *Financial Challenges: Continuing education courses and learning materials can be expensive, which can be a barrier for some students.

Solutions:

- * Show practical relevance: Use examples and practical exercises that show how mathematics can be used in real life.

- * Create engaging learning materials: Create engaging and engaging learning materials using modern technology and learning styles.
- * Teacher training: Teaching teachers to use modern teaching methods and technologies.
- * Provision of learning resources: Provision of learning resources for mathematics in continuing education, such as textbooks, practical exercises and online platforms.
- * Taking into account the different levels of students: organizing different study groups depending on the level of students' mathematical knowledge.
- * Financial Assistance: Discounts or financial assistance for continuing education courses and study materials.

RESULTS AND DISCUSSIONS

Efforts to improve mathematical knowledge in the continuing education system should be carried out together, which will help to increase the interest of students, improve their learning process and achieve their success.

Mathematics and the problems of teaching it with the help of modern pedagogical technologies are one of the current issues in the education system today.

Problems can be divided into the following categories:

1. Problems in the educational system:

- * Traditional teaching methods: Many schools still use traditional teaching methods, which reduce students' interest in mathematics and prevent active learning.
- * Inadequate use of modern technologies: In many schools, modern pedagogical technologies are not used enough, which limits the possibility of making the educational process more effective and interesting..
- * Qualification of teachers: Not all teachers are ready to use modern pedagogical technologies, which can cause difficulties in the educational process.

2. Students' problems:

- * Low interest in mathematics: Many students find mathematics difficult and uninteresting, which reduces their motivation to study.
- * Difficulty solving math problems: Some students have difficulty solving math problems, which causes them to fall behind in their studies.
- * Ignorance of the possibilities of applying mathematics in different fields: Students do not know the possibilities of applying mathematics in different fields, which reduces their motivation to study.

3. Technological problems:

- * Inadequate development of technological infrastructure: Not all schools have the necessary infrastructure to use modern technologies.
- * Limited Internet Access: Some areas have limited Internet access, which limits online learning.
- * Technological illiteracy: Some teachers and students face difficulties in using modern pedagogical technologies.

Solutions:

- * Application of modern pedagogical technologies: Use of modern pedagogical technologies to make the educational process more interesting and effective.
- * Training of teachers: organization of training courses for teachers on the use of modern pedagogical technologies.
- * Enhancing student interest: Using a variety of teaching methods and teaching materials to increase students' interest in mathematics.
- * Show the possibilities of applying mathematics in different fields: Show students the possibilities of applying mathematics in different fields, which increases their motivation to study.
- * Development of technological infrastructure: Creation of infrastructure necessary for the use of modern technologies in all schools.
- * Expanding Internet access: Expanding Internet access in all regions.
- * Improving technological literacy: Improving the technological literacy of teachers and students.

CONCLUSION

It is necessary to make all-out efforts to solve the problems of mathematics and its teaching using modern pedagogical technologies. This requires the cooperation of all participants in the educational system.

References

1. G.Komolova “Elementar tasodifiy miqdorlar va Lebeg integralining ehtimoliy ma`nosi.” “SCIENCE AND EDUCATION” SCIENTIFIC JOURNAL. ISSN 2181-0842. VOLUME 1, ISSUE 9, DECEMBER 2020, 18-21 betlar. 2020-yil.
2. G.Komolova “Diffrensial hisobning asosiy teoremalari.” “SCIENCE AND EDUCATION” SCIENTIFIC JOURNAL. ISSN 2181-0842. VOLUME 2, ISSUE 10, OCTOBER 2021, 9-12 betlar. 2021-yil Dekabr.
3. G.Komolova “Matematikada tenglamaning o‘rni va tuzish metodikasi” “Journal of New Century Innavations” Volume-18, Issue-5,December,2022
4. G.Komolova “ O‘QUVCHILAR QOBILIYATINI TENGLAMA VA TENGSIZLIKLARNI YECHISH ORQALI OSHIRISH” , “International Congress on

Multidisciplinary Studies in Education and Applied Sciences" Canada on December 10 th, 2022A

5. Djalilova T, Komolova G, Xalilov M., "О распространении сферической волны в нелинейно-сжимаемой и упругопластической средах"., Oriental Renaissance: Innovative, educational, natural and social sciences jurnali, 2022 yil, 16.03., VOLUME 2 | ISSUE 3 ISSN 2181-1784,Impact Factor SJIF 2022: 5.947, 87-bet., O'zbekiston,2022 yil, Mart.
6. G.Komolova, Khalilov M., "Stages of Drawing up a Mathematical Model of the Economic Issue"., Journal of Ethics and Diversity in International Communication jurnali, e-ISSN: 2792-4017 | www.openaccessjournals.eu | Volume: 1 Issue: 8, 2022 y, 4.02., 76-bet. Ispaniya, 2022 yil, Fevral.
7. Djalilova T,Atabayev K, Komolova G "Solution of the energy equation of a two-phase medium taking into account heat transfer between phases." "ACTUAL PROBLEMS OF MODERN SCIENCE, EDUCATION AND TRAINING." Electronic journal. KhorezmsScience.Uz, October,2021 10/2. ISSN 2181-9750. 80-85 betlar. 2021-yil,Noyabr.

