

## Use of the Acmeological Approach to Teaching Mathematics

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**Abstract:** This article describes the acmeological approach, one of the main conceptual approaches in the design of educational technology in mathematics.

**Keywords:** acmeology, cognitive competence, credit-module, creative-personal development, semantic communication, methods of motivation, mental and professional development, individual.

### INTRODUCTION

Particular attention is paid to the formation of acmeological abilities of future teachers on the basis of a competency-based approach around the world, the improvement of the didactic system for the development of cognitive competence of future teachers in the credit-module system. In particular, the widespread introduction of innovative technologies in the process of training future teachers, the development of professional competence of students on the basis of acmeological approach, increasing the cognitive activity of students through the effective organization of individual educational trajectories. In today's society, it is clear that we face various challenges throughout everyone's life. When life puts us in such a difficult situation, we need to shape our purpose in front of us. Once we have solved the problem and got the result, we need to be able to compare it to the goal.

### Materials and methods

Decree of the President of the Republic of Uzbekistan Sh.M.Mirziyoyev dated October 8, 2019 No PF-5847 "On the concept of development of the higher education system of the Republic of Uzbekistan until 2030" Digital technologies and modern information in the educational process emphasized the introduction of communication technologies. In this regard, the program of the first President of the Republic of Uzbekistan IAKarimov should be implemented: "In general, I accept science side by side with the words progress, development, progress. The task of science is to shape our future - I understand that it is to show the people the advantages of independence, that there is no future for a non-independent nation, that it is a natural law. "Science should be a driving force, a tool for the development of society."

### Results and discussion

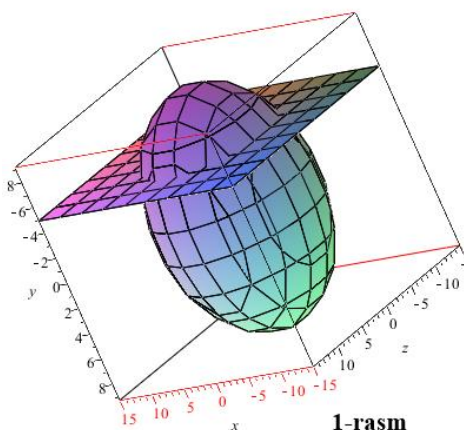
In the modern world, the increase in knowledge and the opportunities to master them are becoming increasingly difficult. The ideal person should be able to develop self-control and self-discipline. As a result, education has changed dramatically in recent years. It's all about improving the effectiveness of education. Today, our society needs modern educated, moral, enterprising young people. That is why we need to raise talented children who will be able to make responsible decisions independently throughout their lives.

Teaching qualities of teaching at a high scientific and pedagogical level, problem-solving lectures, interesting organization of lessons, use of advanced pedagogical technologies, problem-solving of students, demanding, individual work with students, to communicate freely with them, to engage in scientific research. Based on the above, there are many basic conceptual approaches to designing

educational technology in Mathematics. However, the acmeological approach is the core of all approaches. When the human soul is born, it is compared to a blank sheet of paper. That is, education plays a key role in shaping one's personality. We educators and parents need to fill that blank slate with the highest levels of education and upbringing. Students need to focus on finding different ways of thinking, different solutions. Such thinking should be used as often as possible in mathematics lessons, because logical thinking in the student is one of the conditions for the development of creativity. It is at this stage of life that the student tends to grow mentally. You have to learn to think logically and think critically all the time! Every educator must follow the path of improving education, using new, more effective forms and methods of education that will reach the peak of human development. I think every educator should be educated on an acmeological approach. Since maturity is associated with the individual, the peak of personal development and individual activity, this peak is called "acme" in Greek, and this system is called acmeology. This includes human activities. For example, the highest achievements of an individual in any field. Acmeology, based on natural, human rules, studies not only the success of professional skills, but also the laws and mechanisms of both spiritual and social development in human maturity, the degree of achievement of social and spiritual heights. The concept of acmeology was first introduced by N.A. Ribnikov. The main task of acmeology is to form and strengthen what is required in the human mind, allowing self-awareness, self-development.

The specific structural features of acmeological technologies are the stages of self-development of the teacher, self-expression, self-assessment, self-regulation, student self-knowledge. It is about developing a sense of self. To develop an acmeological approach, to deepen the subject materials, to acquaint with modern examples, to approach the problem in a different and unique way, to express personal opinion, to present knowledge in the textbook (by the teacher), to actively motivate students, didactic requirements are set in the process of acquiring knowledge, such as self-education, self-development, giving the opportunity to express themselves. The implementation of such requirements will further popularize the widespread use of modern information and pedagogical technologies in education, improve the skills of teachers, equip them with advanced pedagogical knowledge and technology, in-depth study of the experience of foreign universities and their enable the introduction of effective methods and tools into our national education system.

In the individual implementation of logical problems, students work at their own level of knowledge, based on their abilities. As a result, each student will be able to show their potential and feel the joy of success. We need to teach educators not to be afraid of their mistakes, but to analyze them so that they do not repeat them later. To create an acmeological environment, we educators need to develop motivation and provide lesson assignments in a non-standard way. For example, it would be appropriate for us to show hyperboloid diagrams on the topic of second-order surface equations using the Maple program (Figure 1), or the definition of a trapezoid for a lesson on "Trapezoid" can be given poetically as follows:



My name is Trapezoid,  
I am always ready to work.  
My principles are parallel,  
My side is differen

Acmeological educational technologies involve the intensification of the learning process based on the creation of different conditions in the educational process. Intensification of education is the provision of a large amount of information, in addition to the conditions for the quality of science.

Intensification of education is an effective increase in labor productivity in each unit of time. It should be noted that with such a system of organization of education, the student works independently. It is advisable to give students a step-by-step understanding of the mathematical concepts so that each step is more complex than the previous one. Expanding students' worldviews is the basis for research. At the same time, they gain experience in logical thinking skills and select scientific articles in mathematics based on their topics of interest. After all, stepping into science is the way to success.

The acmeological approach plays an important role in the full activation of the student's potential. This approach is aimed at the comprehensive development of students, their achievement, the formation of sustainable internal motivation. For example, derived from a function When learning to take, students may ask themselves which function is a product of a given function. And we learn to find the origin of a function. Or, the parabolic in the passage of the subject of the second-order lines, and the question of what would happen if it were three-dimensional in the study of hyperbolas. As a result, we study second-order surfaces. Gradually, students 'thinking expands. As I said above, it would be more appropriate if we used modern technology to move the subject (Figure 2). This is because some students have a higher level of memory.

If a person values himself, he will begin to understand himself. In this regard, each lesson builds students' self-confidence by showing them something. Students are given the opportunity to reflect on their actions, their thoughts, their ways of doing things. This opportunity helps students master the principles of self-regulation and collaboration with the teacher. As a result, students are able to think about their behavior and level of knowledge.

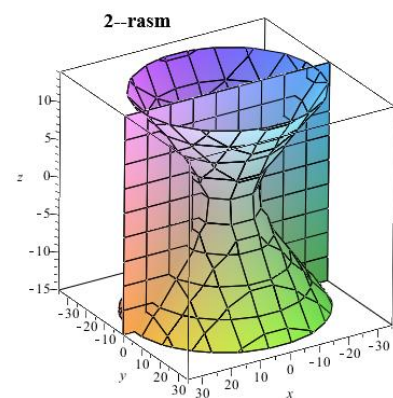
For many students interested in mathematics, the first impression of this science is that they find the unknown from what is often known in science. Every student should be able to see the beauty of mathematics. In the lesson, students should be given interesting, logical questions and tasks, mathematical sophisms to increase their natural interest in a new topic. This awakens in students an understanding of the need to learn it because they do not have enough knowledge to solve them and to overcome future challenges.

Every educator needs to be able to make a significant impact on the learning, achievement and development of their students. We educators must always be concerned about the future of our students, the quality of their education and ultimately their successful future. When educators create an acmeological environment in the classroom, students develop themselves, improve, and achieve their "I".

It requires great professional skills in educators to develop students 'mathematical skills. The key elements of the acmeological approach play an important role in this. The attitude of the educator to his work, to his actions is a key element. It is important to determine the effectiveness of each lesson, changes in the quality of knowledge, the acquisition of practical skills, the development of interest in science. A specialist with a high level of acmeological culture always strives for the highest.

## Conclusion

Thus, a key indicator of the quality of acmeological education is that the educator and the student present their abilities and capabilities. The acmeological educational environment is, first of all, the creation of conditions related to the activities of teachers specializing in all disciplines. The acmeological learning environment leads to the comprehensive development of the individual, taking into account his individual characteristics. Acmeology is the ability to realize opportunities on their own. Acmeology is where the exact and natural sciences meet. The subject of acmeology is considered to be a new



interdisciplinary field of knowledge in which a mature person develops himself, is able to self-analyze, and prepares for professional activity. Pedagogical acmeology reveals the conditions for the rise of pedagogical activity and pedagogical dialogue. In my opinion, it is necessary to effectively use modern foreign experience on the basis of acmeological approach to the organization of classes, taking into account the requirements of modern times and the formation of comprehensively advanced specialists. There is a need to introduce and improve methods that help learners to master existing skills in a short period of time.

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