



Improving The Methodology of Passing Practical Classes in Math on The Basis of An Active Approach

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Abstract. The article will talk about the methodology for activating the activities of students on the basis of an active approach in practical classes in mathematics

Keywords: based, information, education, mathematical, students, activity, play, activity, part, create, study, content, technology, interactive, teaching, universal, knowledge, skills, conditions.

The personality-oriented, humanistic content of education is the essence and the issues of the possibility of students to demonstrate educational activity in changing socio-cultural conditions are reflected in the research of many scientists, which forms the basis for the development of specific mechanisms of teacher innovation activity. Frames as an educational technology aimed at the transmission of educational information to education recipients, the implementation of independent cognitive activity in the processes of its assimilation which have been studied in research of A. Bondar [1], N. Kolodochka [2], M. Minsky [3], M.A. Choshanov's [4] work.

The development of mathematical disciplines based on geometric methods and techniques of mathematical analysis allowed H. A. Sultanov and V. A. Krutetsky to create a classification of types of activities (labor, training, play) based on the analysis of the activities of the labor and play due to the fact that they cannot be recognized as valid, they may be invalidated [5].

M. G. Davletshin believes that in order to learn laws of formation skills and competencies to understand the processes of acquiring some kind of activity first of all it must be begun with understanding skills and competencies. There is a list of skills and competencies, which people apply in different processes. They can be mobile, sensory and mental.

It can be insisted that to mobile - all skills of physical labor; to sensory - to quickly and accurately perceive light, sound and marked information in measurement, control; to the mental (intellectual) immediately oral and written calculation, to determine the direction in place and on the map, to work with a book, to collect archival materials, to conduct a scientific experiment etc [6].

X.A. Sultanova divides skills into educational (comprehension of educational material, logical analysis of educational material, related to creativity) and skills according to the field of application (General, applied in a specific group of disciplines, applied in one discipline) [5].

According to G.I. Sarantsev, an active approach acquires such a meaning and essence as: the composition of the methodological basis of the methodology of teaching mathematics; teaching methods of activity; teaching various actions corresponding to the content of teaching mathematics; as an educational activity [5].

In organizing the cognitive activity of students in the continuation of practical classes, a special emphasis was placed on the following components of it, depending on the educational activities in the study of mathematics, such as solving mathematical examples and issues by them, mastering mathematical concepts, affirmations: understanding the problem of learning by students; performing educational actions; performing control and evaluation actions by students [7].

In the process of teaching mathematics in higher educational institutions, an important role is played by the development of universal educational actions in students. Universal learning actions are the sum of the student's actions that ensure cultural identity, social competence, tolerance, the ability to independently learn new knowledge and skills, including the organization of this process, as well as the ability of the subject to develop himself and improve himself by consciously and actively mastering a new social experience [8].



In order for students to successfully master educational subjects, including mathematics, it is necessary to form the following types of universal educational actions: personal, regulatory (organizing), cognitive, communicative, universal, logical v.b. But in traditional training, this task is very difficult to accomplish. In the context of traditional education, there is a contrast between the need for students to form universal learning movements and the insufficient technological development of this process. The solution to this problem is manifested in changing the organization of the educational process in the training session. In a short time, students should not only learn a large amount of knowledge, but also learn to think, independently acquire knowledge, apply it in new situations [9].

Practical training consists of three systematic parts: introduction (preparation for pre-training), practical training itself (mastery of thematic knowledge in a group, formation of practical skills and competencies) and the concluding part (on the loss of gaps identified in knowledge after practical training). Not only the practical training itself, but also the introductory and concluding parts are a necessary link in the holistic system of mastering the topic brought to the discussion (table 1).

Table 1

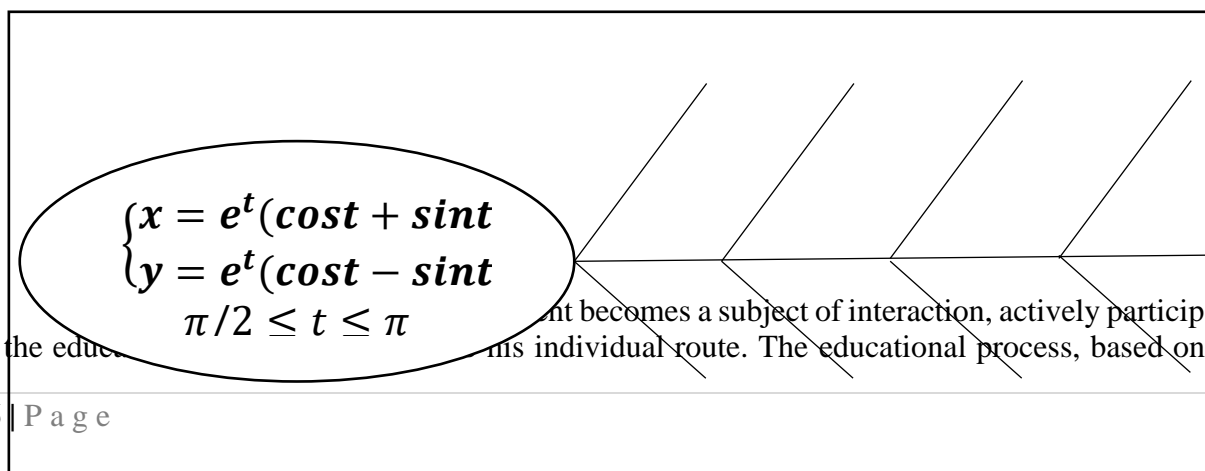
ANALYZE OF CONCEPTS

Concept	Analyze (what do I know?)
1. Derivative of function	
2. Geometric meaning of derivative	
3. Mechanical meaning of derivative	
4. Complex function derivative	
5. Parametric function derivative	

The use of an interactive model of education implies the modeling of educational situations, the use of role-playing games, the joint solution of problems. The dominance of the participant or any thought in the educational process is condemned.

Table 2

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in the educational process, the student becomes a subject of interaction, actively participates in the educational process, based on the individual route. The educational process, based on the



use of interactive methods (table 2, find the length of curve, which given with parametric function) and forms of education, is organized by adding all educational groups to the cognitive process. Collaborative creative activity states that each participant makes a special contribution during the exchange of knowledge, opinion, method, method, methods of activity during active work [10]. Work is organized individually, in pairs and in a group, project work, problem situations, discussions are used, work with various sources of educational information is carried out. Interactive methods are based on interaction, student activity, reliance on individual (group) experience, forced feedback.

In conclusion, in order to increase the effectiveness of the educational process, interactive forms of education are used so that students can perceive their success, their intellectual states in creating comfortable teaching conditions in practical and equivalent activities, and, it should be noted, have a high performance in training.

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