

THE IMPORTANCE OF USING INTERACTIVE TECHNIQUES IN TEACHING MATHEMATICS

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ABSTRACT

This article shows the effective aspects of the use of innovative methods in mathematics lessons, the state of integration between disciplines, the possibilities of information and communication technologies in the creation of innovative methods. The article also recommended techniques "advertising", "rainbow Polish", "double fingers", "innovatsoin" "Krassvord".

Keywords: innovation, method, innovative activity, innovative environment, pedagogical innovation, technology, information technology, integration, Microsoft Excel program.

INTRODUCTION

Pedagogical innovations in innovative activities: the creation and application of new methods and techniques of teaching ensures effective and high-quality organization of the educational process.

Pedagogical innovation is a means of enriching and developing the theory and practice of education and upbringing by introducing changes in pedagogical activity that were previously unknown in the educational process. In fact, modern pedagogical technologies increase the productivity of the educational process, form the process of independent thinking of students, increase the enthusiasm and interest in knowledge in students, solid assimilation of knowledge, free use of them in practice, form skills and competencies. It is very important that in the elementary grades, when the child's thinking is now taking shape, the teacher's skills, he can skillfully apply pedagogical technologies to the educational process, look for new methods and techniques of education, be able to creatively use pedagogical experiments.

Therefore, the introduction of pedagogical innovations in the educational process, the application of pedagogical technologies in education, the use of various innovative methods and techniques, the relentless search for improving the effectiveness of Education have become the need of today.

It is known that today in the course of the lesson technologies "mental attack", "Krassvord", "Sinkwein", "Muzyorar", "Keys stady", "Insert", "Venn diagram" and "BBB" are used to organize the educational process. In this article, we recommend several more innovative techniques that serve to ensure the effectiveness and quality of the course process.

The "advertising" method is largely effective in elementary school reading classes. This method can be applied to the stages of the course process: asking for the mentioned topic and strengthening the new topic. In the process, the teacher gives the students handouts in the order appropriate to the essence of the topic, in which they say "advertise! the fact that the compound" is written is the main rule.

Readers will have to advertise the subject given in the distributions, through the qualities inherent in the person or subject in it, behavior, excerpts from the work, roller instructions. The method can also be used to recommend small works of poetry, fairy tales, stories and other genres for extracurricular reading classes. In this case, the reader or community of readers recommends small works of poetry, fairy tales, stories and other genres to read to other readers, using different views of advertising in the recommending process. The advantage of the "advertising" method can be seen in:

- students' speech becomes fluent, skills are formed to speak in front of the team, to be able to freely express their opinion;
- a meaningful Organization of the course process is achieved, students' interest in the lesson increases, respect for the book is formed in them, their enthusiasm for reading fiction increases;
- the worldview of students expands, a healthy competitive environment appears, the ability to respect other people's thoughts, listen to them carefully, concentrate and think is formed.

The "double fingers" method is one of the effective techniques that can be used in native language lessons. The name of this method is of interest to the child in relation to its implementation. The method can be used at different stages of the lesson.

The name of this method is of interest to the child in relation to its implementation. The method can be used at different stages of the lesson. For example, in native language lessons, it is effective to use the topic of number in giving home as a task. The "double fingering" method embodies the integration of native language and Applied Art. Students' fingers are used in the application of the method. In this, the teacher explains to the students how to write numbers and counting words on the fingers of the right hand with the help of manual labor, while on the fingers of the left hand it is necessary to draw pictures of the person-objects, the amount of which is indicated, and when the fingers of the two hands are clasped at the final stage,

Before the teacher, the "double fingers" are displayed as a sample and the image is reversed: the left hand is pasted on the index finger with the number 2 and the paper with the counting word, and the right hand is drawn on the index finger with a picture of the onion. When we pair two fingers, the word "two heads of onions" is formed. Continuing like this, we also draw pictures on the rest of our fingers and write down the numbers.

Through the "pair of fingers" method, the following knowledge, skills, qualifications and qualities are formed in children:

- the student's aesthetic taste is formed, his creative thinking increases, his interest in Fine Arts and painting increases;
- with the development of the student's hand fabrics, his capacity for intellectual thinking is formed;
- the teacher will find out to what extent they understand the topic, in addition to increasing their interest in the lesson, encouraging them to be active;
- in addition to the science of the native language, the student has an increased interest in mathematics, painting and technology. Because, making the reader "double fingers" in the process, he draws, cuts and calculates the picture on his fingers;

It is advisable to apply the "rainbow Polish" method for elementary grades. This method can also be used in mother tongue, math and reading lessons. For example: when categorizing words in native language lessons, the task is to categorize words such as puppet, machine, laugh, cry, yellow, large, small, nine, and place words in the noun phrase category in a blue line, placing words in the adjective word category in an air color line. In the mathematics lesson, this method can be applied during the separation of numbers into room units. That is, if we take the first color of the rainbow as a one-digit number, then the color in the second row is an example of a two-digit number. Through the "rainbow Polish" method, the following knowledge, skills, qualifications and qualities are formed in children:

- the reader remembers through colors which category of words enters the circle;
- visions of natural phenomena appear in the reader, in which atrophytes and love of nature, skills of preserving it are formed;
- the worldview and the circle of imagination of students expand, the skills of concentration, thinking, mindfulness and resourcefulness develop.
- The crossword method is one of the techniques used from the beginning, which we can meet in a far textbook of each class. In the preparation of crosswords, the Microsoft Word application of the computer, which is primarily an information and communication technology tool, is used. However, it can be seen that crosswords made through the computer's Microsoft Excel program give a more effective result than the previous ones. True, the Microsoft excellent program is somewhat complex and is launched on the basis of formulas, however, the fact that teachers acquire knowledge within the framework of information and Communication Technologies is a requirement of the period.
- Innovatsoin crosswords can be used at every stage of primary education, as well as in upper-class lesson processes. Before performing the crossword prepared in Microsoft Excel, it is possible to bring thoughts that encourage students to perform the crossword and further increase their interests by doing so.
- In the process of solving an innovative crossword, our "smayl" goes into a form of frustration if students respond incorrectly, it can be seen that the "smayl" are laughing if they answer correctly. The advantage of crossword is that checking the correctness of the answers set by the students is determined by the computer program, and not by the teacher, and appears on the screen. This ensures that teacher opportunity is increased and time savings are achieved when evaluating students. In the end, when all the answers are correct and clear, we can see words of praise towards readers on the screen.

"Through the innovative crossword method created in the Microsoft Excel program, the following knowledge, skills, qualifications and qualities are formed in students:

- in students, interest in technology is formed, the use of which is extensive, as well as information in classes
- the use of technologies will raise students' interest in classes, ensure an improvement in the classroom environment;
- checking the correctness of the answers set by the students is determined by the computer program, and not by the teacher, and appears on the screen. This ensures that teacher opportunity is increased and time savings are achieved when evaluating students.

In conclusion, we can say that in a process in which the information communication system is developing at a high level, it is very important for a primary education teacher to be able to deeply know, analyze technology and technology, and be knowledgeable and skilled at the level of innovation creation. To do this, in the process of organizing the lesson, it is advisable for all students to be able to choose and apply methods that are understandable, easy and interesting, use visual weapons, implement new manufactured technical means, encourage learners to work creatively, independently, use pedagogical technologies correctly and efficiently. While a teacher can organize a lesson on the basis of creativeness in a meaningful way, the student's interest in science will continue to increase.

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