



**THE USE OF ACTIVE LEARNING TECHNOLOGIES IN MATH CLASS FOR
HIGH SCHOOL STUDENTS IN KAZAKHSTAN**

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Abstract

The aim of this work is to promote the further development of active learning methods, using the research of world-famous scientists of Kazakhstan. Active learning is the current teaching methodology today. We have only a few teachers in Kazakhstan who use it. Now is the time to educate educated youth, making active learning more interesting? Therefore, we hope that this project will be useful for our teachers. It is written based on studies by well-known researchers about the use of active learning, the ability of students to think creatively, the degree of understanding of the lesson and other advantages.

Introduction

The idea of active learning is that active learning needs active participation in the lessons is the foundation and although it does not affect it is particularly important, our modern education and educational practices do not always show what we know or believe about active learning. We want in this our project to consider some different thoughts and ideas about action learning, which influenced the greatest impact on active learning, also learning-oriented learning. The term active learning also has a connection with it; the idea of student orientation is a difference from teacher orientation. Teaching was a noticeable flail of interest among educators in the late 1970s and early 1980s. You can speak leading new words of your years, they at the same time played well in the same role and today's mixed learning or MOOC. In recent decades, one can say a somewhat increasing number in teachers and research in the field of education, a constant interest in the development, dissemination, and evaluation, in models of teaching something or learning something that can be said are provided to students to give more opportunity for knowledge. "In the 1980s, a number of serious changes took place in that teaching and mathematics in schools, which can be described as a departure from explanatory training in order to you need to crawl a higher spectrum of research or give more attention to solving the same problems or research approaches to problems." How a university student learns as a math teacher, we were interested in effective learning and understanding. This project will address the question: "Is active learning an effective strategy to improve learning and understanding in a math lesson?"

What is the active learning?

"In essence, active learning can be described as the use of learning activities, where students receive a significant degree of ownership and control over the educational activities used, where the learning experience is not limited in advance, and where the student can actively participate and shape learning experiences" [1]. Active learning is also very closely

related to project (or problematic) learning, which can be described as a “teacher-centered and teacher-facilitated learning approach” [2]. It can express a lot of things. Sometimes it may express students working in joint teams to solve problems. In other cases, students may collect information as Class and analysis of their results. However, active learning does not always have to be something. It is heavy, time consuming or requires a lot of materials. Small active learning Activity may be to roll dice individually to find probabilities it was in the past few decades; they have been more integrated into primary and secondary classes. Teaching has been seen in many classrooms for centuries and is still common to our day. Actively giving knowledge is a way to teach something, which complements the active participation of students in the course and in discussions and solutions to problems or different studies, you can add role-playing different games and other different methods such as a student you can actively participate.

Active Learning Strategies

1. Group activity, practical training, individual learning requires students to apply their knowledge to conclude about an open situation in the real world. ...
2. Individual activity. Application Cards. ...
3. Partnership activities. Role-playing game. ...
4. Visual organization of activities. Categorization of grids.

Literature review

This research was based on the literature, which has a proactive approach to learning. We can say about an active approach to learning using various theories and compliance with modern trends. In addition to influencing the approach to learning, with the various active learning strategies required for students and teachers, each student can have their own style. Learning outcomes are the basis for better preparation of teachers for lessons using different techniques for an active learning approach. The words "active learning" usually refers to any

teaching method if the learners are not involved in the learning process [3]. It is even more important that students and teachers engage in their own learning with correct thinking tasks such as data analysis and synthesis, even classroom assessment [4]. The term active learning has many teaching methods that place responsibility for the lessons on the student. This teaching style will orientate students, not teachers, and help students and teachers to better see themselves and their peers who did not know themselves. Something like knowledge requires an active process, not passive listeners [5]. Several other terms, such as collaborative learning, problem learning, group learning, and meaningful learning, are also associated with active learning and are discussed in this section. Charles Bonwell and James Ason (1991) put forward the idea of active learning in the 90s to promote a variety of student-centered approaches. They suggested to us traditional methods of lectures, when teachers stand in front of the hall, and students listen and take notes, this is not active learning, and that students should read, write more, and participate in learning [6]. New theories also suggest that the quality of teaching depends on the student's ability to guide your learning orientation, develop interviewing skills, and the ability to reflect and control the process [7].

In this study, we looked at a range of active learning materials and games. We would like to offer you something that will be useful in active learning. Active learning - to make learning interesting for students, to create conditions for learning. Therefore, the role of play in active learning is so important. The child is refreshed and learned through play.

Kinetic games

Kinetic games provide your students with the energy they need and transform your lesson. Using outdoor games or just letting students move in your classroom is a great way to activate creativity, such as dexterity, attention, observation, and logical thinking, and to develop their physical and intellectual qualities. These exercises and games can be adapted to different ages but are mainly for students in grades 7-9.

“Fly Beater” game

For this game, the teacher prepares cards with pre-learned or new words, problems, or theorems and pastes them on the board. We also need a referee who will calculate the points of the teams. Students are divided into two teams. Teams are lined up in two rows. The first two students from the teams stand close to the board. The teacher gives them a "fly fly". The teacher then says the word, problem, or theorem in Kazakh, and the students' task is to hit the card with the correct answer as soon as possible. Whoever is first will bring one point to the team and give it to the next player to increase the team's flight speed. The student of the other team who has not hit the correct answer first remains on the board until the first word is hit. If students hit the wrong answer, the team loses one point.

Change the layout of the tables and play the Find game

Through this game you can organize children's work. In some lessons, students will find it fun to work in groups, and sometimes you can remove all the tables and play in a circle. Rules of the game: the teacher prepares cards with preliminary problems and theorems, for example, 30 words for the last block, then students take turns to take these cards and try to interpret them differently, that is, to name it without the meaning of the word. For example, I have the word "Ambitious" on my card, which can be interpreted as "someone who wants to be successful." The person who finds the word gets a card. The student who collects the most cards win.

Conclusion

In this study, we emphasized the role of play in active learning. In addition, over the last five to six decades, much research and teaching methods have been developed to find optimal and noisy teaching and learning methods. By reviewing them, we offer games that are currently positive for active learning. In the study of active learning, special attention was paid to the following criteria. First of all, the rapid change of the times should be in line with the

times in our concept of education and be able to meet its needs. It also needs to be improved in line with the latest news. Communicative society is changing day by day, so education must change. Based on these findings, we suggest 3 important areas of impact on student learning through active learning methods. First, additional research is needed to conduct research, as a system for student self-development is needed to improve learning outcomes in accordance with complex cognitive tasks. Students' attention is often drawn to the field of play. In the current study, I studied the effect of intensive training based on actual training of students, active methods of teaching, the effect of games in active learning. It was also found that there is a link between the various functions, programs, games on the Internet platform and the interest of students in learning and education. For example, to turn certain problems into work based on the development of students' thinking skills, it is necessary to study Internet resources that have a great impact on their minds. It can be actively used on modern social networks such as YouTube, Instagram, or Tik-tok. At the same time, just as any scientific and technical innovation has a great impact on cognitive communication, we need quality research in this area. In future research, we will see how their motivation and interest in shaping students' behavior and interests can have a significant impact on learning outcomes.

References

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