

IMPACT OF THE STEAM APPROACH ON MASTERY

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Abstract

Decree of the President of the Republic of Uzbekistan dated 05.09.2018 PF-5538 on additional measures to improve the public education management system, including the approval of the Modern School State Program of the President of the Republic of Uzbekistan there is talk about the introduction of the draft decision. Construction of modern schools based on model projects developed using ecologically clean materials and alternative sources of energy; equipping schools, including classrooms, with new comfortable furniture, modern educational and laboratory equipment, textbooks and educational materials, computer and multimedia equipment, video surveillance systems; within a period of three months, it is decided to radically revise the procedure and system for improving the qualifications of leaders and pedagogical staff of general education institutions, with the aim of optimizing curricula and programs, wide use of innovative, including distance pedagogical methods, and fully increasing the efficiency of this process.

Accordingly, Presidential schools were opened in every region of our Republic in order to identify talented young people. They specialize in teaching STEAM subjects. STEAM is a new method of teaching schoolchildren and is an alternative system to the traditional education system. It is based on the system of teaching children simultaneously in Science, Technology, Engineering, Art and Mathematics, in which students learn practical and They will learn with the help of interesting project activities.

The main idea of the STEAM approach is that practice is as important as theoretical knowledge. That is, during learning, we need to work not only with our brain, but also with our hands. Learning in class is incompatible with a rapidly changing world. The main difference between the STEAM approach and the traditional approach is that students use both their minds and hands to successfully learn different subjects. They learn knowledge "on their own".

What is the mind (mind, intellect)? Intelligence is the ability to organize knowledge in the most effective way, that is, with the least expenditure of time and resources. The modern perspective on the mental development and content of schoolchildren is closely related to the theoretical ideas about cognitive structures, through which he draws conclusions about the environment, analyzes and synthesizes all new impressions and information. The more developed they are, the better they understand and perceive the possibility of obtaining, analyzing and synthesizing information.

STEAM approach	Traditional approach
The cooperative activity of the teacher and the student based on the interdisciplinary integration approach. In this process, the student and the teacher think creatively.	The student and the teacher think about one subject, resulting in scattered knowledge.
It forces you to search for answers to the problems and questions.	Answers arise simply because ready knowledge is given, knowledge is passed from teacher to student.
Teaching is based on artefacts (man-made objects) and events. Because the context is related to the future, it is interesting and relevant today.	Based on the plan and textbook, it will be conducted by topics, and it will be mentioned that it will be needed in the future.

A student's research in cooperation with the teacher and other participants in the project. Cooperation skills are formed.	The student performs tasks individually without knowing why.
The most important is the product obtained during the activity.	The product of the activity is not specified. The evaluation of the result in the form of points is important.
Product evaluation tasks and criteria result from collaborative work.	There are correct answers in the textbook.
Project planning and self-control.	The teacher controls and evaluates the correctness of the performance of knowledge tasks.

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