

ADVANTAGES OF USING STEM EDUCATIONAL APPROACH IN TEACHING PRIMARY SCHOOL STUDENTS

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The increasing attention to learning foreign languages in our country, especially the implementation of reforms to learn foreign languages as a means of communication from a young age, is the result of progress in the field of education. Almost all reforms in the field of education carried out in our country include further development of the education system, raising the quality of education to a higher level, and wider promotion of learning foreign languages. President of the Republic of Uzbekistan Sh. Resolution No. PQ-5117 dated May 19, 2021 of M. Mirziyoyev "On measures to bring the popularization of learning foreign languages to a qualitatively new level in the Republic of Uzbekistan", Resolution No. 312 of the Cabinet of Ministers dated May 19, 2021 "Foreign languages Resolution "On measures to effectively organize popularization of learning", Resolution "On measures to further improve the system of studying and solving youth problems" dated June 7, 2022, and a number of similar decisions and decrees supporting perfect learning of foreign languages - The fact that it aims to provide material and practical support to young people to learn foreign languages can be a proof of our above opinions.

The Agency for Popularization of Foreign Language Learning under the Cabinet of Ministers is responsible for popularizing foreign language learning among the population, coordinating the introduction of internationally recognized programs, modern textbooks and study guides at all stages of education, developing advanced teaching skills of teachers in this regard, "kindergarten - school - higher education". In order to introduce a chain of continuous education based on the principle of "organization-enterprise", as a result of the assignment of tasks such as coordinating the development of methodologies and recommendations for language learning suitable for all levels of the population, it is envisaged to bring the learning of foreign languages to a higher level.

The main goal of introducing and promoting the STEM interdisciplinary approach in the educational system of the Republic of Uzbekistan is to switch to a teaching method in which the teacher is not dominant (teacher-centered), but the student is in the center (student-centered).

President of the Republic of Uzbekistan Sh.M. As Mirziyoyev stated in his work "New Uzbekistan Development Strategy": "In the coming years, fundamental reforms are being carried out in the education system as well as in all areas in order to develop our country in all aspects and create a new Uzbekistan." Dozens of important decrees, decisions, concepts and programs were adopted in this regard. Implementation of the STEM education system in schools in order to develop the understanding, knowledge and skills necessary for the practical application of concrete and natural sciences in our youth, and for them to be formed as mature personnel in the fields of engineering, information and communication technologies, and science in the future. a 5-year program will be developed. For the implementation of this program, funds of the Asian Development Bank in the amount of 100 million US dollars will be directed."

STEM (Science, Technology, Engineering, Maths) is a curriculum that combines science, technology, engineering and mathematics. For elementary school students, it has the following advantages:

- Science (Science) - encourages answering and checking questions involving experiments.
- Technology (Technology) - refers to the use of simple tools such as colored pencils and rulers, as well as more complex tools such as microscopes and computers.
- Engineering (Engineering) means identifying problems and testing solutions.
- Mathematics (Maths) - deals with numbers, patterns, shapes, organizational skills, etc.

Art in the STEAM approach can be added to the teaching of elementary school students to learn science in an integrated manner with STEM. Because drawing and the variety in it can quickly attract students, increase their interest in science and contribute to the development of creative thinking.

Developing STEM lesson plans can seem complicated and difficult, but there are 5 key steps to follow when applying STEM principles to your lessons.

The first step in getting started with STEM is to develop lessons and lesson plans. A single lesson can be fully STEAM using the basics of science, technology, engineering, art and math.

There are 5 stages of using STEM in the teaching process:

1. Brainstorming

We can take "Butterflies' way of life" as an example in teaching natural science to primary classes. In the 1st stage - brainstorming, students express their thoughts and what they know about butterflies. The teacher writes the students' thoughts on the board.

2. Research. At this stage, the opinions collected at the initial stage are summarized, analyzed and general conclusions are drawn.

3. Application, i.e. the 4 fields of STEM - science, technology, engineering and mathematics, and a fifth pillar of art can be added. Importance is given to which one can be meaningfully and appropriately included in the lesson and connected with the topic. All 5 areas cannot be included in all lessons.

By showing a video about the way of life of butterflies, students can be engaged by connecting science and technology. In addition, you can easily learn a foreign language by watching a video about butterflies and related vocabulary words in English.

4. Creation - students should be encouraged to be creative by stimulating creative thinking. This stage enriches students' interest and knowledge in the fields of engineering and technology.

Pupils can be given the task of making a model of butterflies from colored papers or drawing a picture. Finding the colors given by the numbers by solving the examples to connect with mathematics and painting the image of butterflies in the handouts given by the teacher is an interesting task and serves to connect with the science of visual arts.

5. The stage of impression, i.e. analysis of knowledge and experience gained after each lesson, identification of advantages and disadvantages. In this, answers to questions such as which methods are the most suitable for students, which areas are most interesting and can develop their critical and creative thinking are obtained.

From the above examples, it can be concluded that effective teaching in elementary grades by linking education with natural sciences, nature, visual arts, mathematics, technology, and English language requires the use of modern approaches and methods in today's modern education. is the need of the lim system.

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