

THE USE OF STEAM TECHNOLOGIES IN DEVELOPING THE PROFESSIONAL SKILLS OF THE ENGLISH LANGUAGE FOR STUDENTS OF THE MINING AND METALLURGICAL FACULTY

Abstract: One of the leading modern trends in the use of STEAM technologies in the development of professional English language skills among students of the Mining and Metallurgical Faculty.

STEAM is pedagogy and the possibility of implementing these areas in the educational activities of an English teacher in coursework.

Keywords: STEAM, pedagogy, student development, English

Today, in the education of the Republic of Uzbekistan, there are many initiatives that can help, first of all, teachers, and through them - schoolchildren, in their desire to master modern innovative technologies. Of particular importance for the development and implementation of these technologies in pedagogical practice are advanced training courses in institutions of additional vocational education.

Analysis of the main advantages of STEAM - education teaching English to students of the Mining and Metallurgical Faculty combines an interdisciplinary and project-based approach, the basis for which is the integration of natural sciences into technology, engineering creativity. STREAM pedagogy is the most comprehensive course of research initiatives and is transformed from STEAM through the development of thinking skills embodied in reading and writing. Excellent transformation of the curriculum into extracurricular activities, the purpose of which is to abolish the teaching of the above-mentioned disciplines as independent and abstract. It is very important to teach science, technology, engineering, because these areas are closely interconnected in practice.

Application of scientific and technical knowledge is in real life. STEAM education through practical exercises demonstrates to students of the Mining and Metallurgical Faculty the application of the English language of scientific and technical knowledge in real life. In each lesson, they design, build and develop products of the modern industry. They study a specific project, as a result of which they create a prototype of a real product with their own hands. For example, when building a rocket, young engineers learn in English such concepts as the engineering design process, launch angle, pressure, gravity, friction, trajectory and coordinate axes. Developing critical thinking and problem solving skills in English. STEAM technologies develop the critical thinking and problem-solving

skills necessary to overcome the difficulties that children may face in life. For example, students build high-speed cars and then test them. After the first test, they think and determine why their car didn't make it to the finish line. Did the front end design, wheel spacing, aerodynamics, or launch force affect this? After each test (start-up), they develop their ideas to achieve the goal.

Active communication and teamwork. STEAM technologies are also characterized by active communication and teamwork. The discussion stage creates a free atmosphere for discussion and expression of opinions. Children are so free that they are not afraid to express any of their opinions; they learn to speak and present. Most of the time, students do not sit at their desks, but test and develop their designs. They communicate with instructors and their teammates all the time. When students are actively involved in the process, they remember the lesson well. Development of interest is in technical disciplines. The task of STEAM-teaching in courses is to create preconditions for developing students' interest in natural science and technical disciplines. Love for the work done is the basis for developing interest. STEAM classes are very entertaining and dynamic, which does not let children get bored. They do not notice how time passes in the classroom, and also do not get tired at all. Building rockets, cars, bridges, skyscrapers, creating their own electronic games, factories and submarines, they are showing an increasing interest in science and technology.

Writing, like any other art, teaches the entire set of "thinking tools" that are necessary to be creative in any discipline in English lessons. Convert sensations, feelings and intuition into a clear communicative form; and combine all this information from sensations into words that create not only understanding, but also delight, lead to repentance, make you feel anger, desire, or any other human emotion that will transform understanding into action. Mastering the writing form is necessary not only for the compilers. As part of the course preparation of students, it is advisable to use STEAM technology as a generator of innovative ideas that simulates the future situation in the lesson. Collaborative products are discussed by teachers in groups and relevant projects are proposed for further implementation in educational activities. The table discusses the ideas of lectures and practical classes for teachers of mathematics or fine arts, which are aimed at the formation of research, search, and critical, analytical and predictive competencies in teachers when working in the STEAM environment.

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