



SPECIFIC ASPECTS OF STEAM TECHNOLOGIES IN PRESCHOOL EDUCATION.

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Abstract: Through STEAM education in preschool education, children develop skills such as critical thinking, creative thinking (creativity), cooperation, communication, physical knowledge, logical mathematics and socialization, and children are more active and take initiative in their own learning. they will be able.

Keywords: preschool education, integration, innovation, technology, global, expert, creativity, scientific culture, association, science, technology, engineering, mathematics, art.

Achieving the educational goals in the new social conditions, organizing various educational activities of children outside of training and training, raising them to be knowledgeable, polite, religious, patriotic, hardworking, well-rounded people. the need of the times, our President Sh. M. Mirziyoyev in his book "The Strategy of New Uzbekistan" specifically emphasized that "Today, life requires a new way of thinking and working, and the formation of national "intellectual centers".

In fact, the skills that children need to learn in our national intelligence centers that we need to build include critical thinking, creative thinking (creativity), collaboration, communication, physical education, logical math, and socialization. In order to develop these skills in children, it is necessary to change the curriculum and apply it to the educational process.

STEAM education in preschool education plays an important role in the implementation of the above goal. STEAM education is a suitable approach to answer the problems of the 21st century. It is worth noting that in many literature STEAM is a popular pedagogical method for improving creativity, problem solving, scientific inquiry and critical thinking, and providing other cognitive benefits. It is taught in integrated education in early childhood education and is implemented through daily observation of children. It also discusses the impact of STEAM learning in making children more active and able to take initiative in their own learning.

The term STEAM comes from STEM, which encourages children to build knowledge about the world around them by observing, investigating, and asking questions. When commenting on the term STEAM, it is appropriate to consider the definitions of G. Yakman, H. Lee.

Science is what exists in nature and how to influence it from outside;

Technology is something created by man or "Innovation, renewal, modification of the natural environment to meet human needs and desires."

Engineering is "a systematic iterative approach to designing objects, processes, and systems to meet human needs."

Mathematics - studies numbers, symbolic connections, patterns, shapes, uncertainty and reasoning;

Art includes visual, linguistic, humanitarian and physical arts. Art, on the other hand, includes: language arts - the study of all types of communication and communication and how all this is interpreted; art of music; physical art - sports art; humanities (social sciences) - education, history, philosophy, politics, psychology, sociology, theology, etc.; visual arts - aesthetics, where they teach the most ancient, stable cultures of civilizations. [3, 23 p.]

STEM education is a unique bridge between the educational process, career and further professional growth. The innovative educational concept prepares children professionally for the technologically advanced world.

The impact of the STEAM approach on academic performance 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. The main difference of the STEAM approach is that children use both their brains and their hands to successfully learn different subjects. They will read the knowledge they have received.

In a STEAM learning environment, children acquire knowledge and learn to use it immediately. Therefore, when they grow up and face life's problems, whether it is environmental pollution or global climate change, they understand that such complex issues can only be solved by relying on knowledge from different fields and working together. Relying on knowledge of only one subject is insufficient here.

Knowledge helps you find your idea, but what's more important is making it a reality. If we say that the main goal of traditional education is to teach knowledge and use this knowledge to think and create, the STEAM approach teaches us to combine acquired knowledge with real skills.

Integrating STEAM into early childhood education is desirable. Science is often a neglected subject. However, young children are often curious, excited, and eager to learn.

Modern education is more focused on the formation of basic personal competencies, that is, skills that are directly related to the experience of application in practical activities, which help students to achieve results in uncertain, problematic situations, solve problems independently. allows to solve. At the same time, it is aimed at cooperation with others, improving the skills of working with knowledge, and developing children's intellectual abilities.

Currently, there are different interpretations of the terms "mind" and "intellectual abilities". Intelligence is the most common concept and refers to such things as "the ability to carry out cognitive processes and effectively solve problems, the ability to plan, organize and control one's actions in order to achieve a goal."

Understanding everything that interests the personality, such as the pursuit of new and deep knowledge, which is necessary to understand the mind and intellectual ability; the ability to use existing experience and distinguish the main from the secondary; the ability to think coherently, critically, broadly and creatively; the ability to generalize, abstract and find laws, the ability to learn.

In conclusion, at the current stage of development of preschool children's education, the main attention should be focused on comprehensive development of the child's personality. In this

way, ensuring the competitiveness of society and countries is achieved by ensuring curiosity, purposefulness, independence, responsibility, creativity, successful socialization of the young generation.

References:

- 1.SH.M. Mirziyoyev "Yangi O'zbekiston strategiyasi." - Toshkent: "O'zbekiston" nashriyoti, 2021.y.
2. "Maktabgacha ta'lim va tarbiyaning davlat standartini tasdiqlash to'g'risida" gi O'zbekiston Respublikasi Vazirlar Mahkamasining 802- sonli Qarori.22.12.2020 y.
3. Международный опыт развития предпринимательского и STEAM-образования в странах ОЭСР и в мире: Аналитический отчет /Авт-сост. Газдиева Б.А., Ахметжанова А.А., Сагындыкова Ж.О., Тавлуй М.В., Фаткиева Г.Т., Габдуллина З.Е., Аубакирова Д.С. – Кокшетау: Изд-во КГУ им. Ш. Уалиханова, 2018. 23-б