

ASIA PACIFIC JOURNAL OF MARKETING & MANAGEMENT REVIEW ISSN: 2319-2836 IMPACT FACTOR: 7.603 Vol 11, Issue 12, 2022

## EDUCATING GIFTED STUDENTS IN STEM EDUCATION

## Khakimov T

## **Kokand SPI teacher**

**Abstract:** In this article, the issue of training talented students in the STEM field of education in preparation for modern professions is highlighted, which originates from the current education policy. **Key words:** Student, education, STEM, talent, system, Higher education, future, science, world.

It is not the case that those who have different abilities and talents among student youth will be numbered or very unexpected in this bug. In a changing and developing world, the consciousness of students is also expanding. As a result of such changes, educational processes corresponding to the requirements of their talents are being organized. Currently, the world training system is on the verge of becoming the most affordable among states, which of course indicates that the demand for highlevel personnel is the same everywhere. In order to adapt higher education to world standards in creating a digital learning environment, the favorable aspects of digital transformation into traditional educational institutions have been considered for them. [1] the purpose of this is for students to find a job that suits them regardless of where they will graduate from an educational institution in the future.

Modern companies need creative people with a broad outlook, a lover of innovation and developed flexible skills. To achieve this) in the early 2000s, an invention STEM was invented by employees of the US National Scientific Foundation to indicate a new direction of training, which should fill the lack of technical specialists in the country. Since then, STEM development has become part of U.S. government policy and has subsequently spread throughout the world. Today you can get STEM education at leading universities in the UK , Switzerland , Germany , Singapore, Japan and other countries. How World Development and STEM have to do with it, and how a new approach to education can solve the problem of lack of qualified personnel.

What is STEM actually? abbreviation (Science Biology, Physics, Chemistry, technology Informatics, IT, electronics robotics, engineering, Civil Engineering, Chemical Engineering, Mechanical Engineering, Electrical Engineering, Mathematics Mathematics, logic, statistics)<sup>[2]</sup>.

If we spread this abbreviation, we get the following: STEAM is s science, T technology, E engineering, a art (sometimes the abbreviation is accompanied by the letter a (sanat) - sanat, humanities.) and M math. In English, it happens like this: natural sciences, technology, engineering, art and mathematics. Do not forget that these directions are becoming the most popular in the modern world. Therefore, today the STEAM system is developing as one of the main trends. STEAM training is based on the direction and application of a practical approach, as well as the integration of all five areas into a single training system.[3]





The use of STEAM training technology by students studying at higher education institutions is changing their views on training. By paying attention to practical ability, students develop their will, creativity, flexibility and learn to collaborate with those around them.

The STEAM approach teaches us to combine the knowledge gained with real skills. This gives the trainers the opportunity not only to have some ideas, but also to put them into practice and implement them. [4]

By focusing on practical ability, students develop their will, creativity, flexibility, and learn to collaborate with others. These skills and knowledge constitute the main training task, that is, what this entire training system strives for. The language of science is English. If you want to learn science and become a scientist, you need to know this language. Girls need Steam-training programs. Girls in science, due to their orderliness, can do things that boys cannot do.

Science is fun! Science should be cheerful, it should be interesting and attractive to readers. Readers should focus on growing vocabulary as a means of deepening their knowledge. And on the sites there will be new words enriched with general academic vocabulary. In the fields of study of foreign languages, vocabulary is important. Since the complexity in this area is due to the fact that most of the words come from Latin, it is necessary to inform students who speak Spanish, Italian, French or Portuguese, that the Latin roots in academic vocabulary words can be in them, in their native language.[5]

Creative and innovative approach to projects. STEAM tutorial consists of six stages: question (task), discussion, design, construction, testing and development. These steps are the basis of the R systematic design approach.

Bridge between Talim and career. According to various assessments, it is STEAM knowledge that will be needed in 9 of the 10 professionals who are currently the most in demand. Such professions include: Engineer-Chemist, oil engineer, computer systems analysts, engineering mechanics, engineers-builders, robotics, nuclear engineering. STEAM dictates the integrative approach of learning with the concepts of scientific research, technical progress of everyday life. The purpose of such an approach is to promote scientific literacy, competitiveness by attracting the public to the training site, in ensuring the sustainable development of the world's development and economy through training [6]

Referring to the features of STEM training, STEM training is distinguished by its practical and interdisciplinary approach. In addition, training strategies use the following formula: learning + playing + enjoyment + motivation.

STEM classes seek to develop creativity, logical thinking, analytical skills, multidisciplinary teamwork, the ability to innovate and the ability to solve problems. [7]

The approach is based on a combination of theoretical and practical skills. The student covers several areas of knowledge at once, gets the opportunity to use information, check facts in his own experience.[8]

103	ISSN 2319-2836 (online), Published by ASIA PACIFIC JOURNAL OF MARKETING & MANAGEMENT REVIEW., under Volume: 11 Issue: 12 in December-2022 https://www.gejournal.net/index.php/APJMMR
	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/



It is known that the modern training system, unlike traditional training, is a mixed environment that allows you to show how the scientific-theoretical and methodological method studied in practice can be applied in everyday life. Along with mathematics and physics, students learn robotics and programming. In the process, students personally see the result of their knowledge in practice in the exact and Natural Sciences. The importance of STEM training is that the quality of training in the field of real science is low, the material and technical base is insufficient, and the sluggish motivation of teachers and students is all the biggest problem of the training system. At the same time, our state, which is developing in stages, requires the training of highly qualified specialists in various areas of training in disciplines in the field of high technology. In this regard, STEM Tali is in the first place today. This will help in the future to develop the technological process and cover the need for scientific and engineering personnel in our country.

One of the advantage tarfs is stem's active communication and teamwork. The STEM program differs in active communication and teamwork. During the period of communication, a free environment is created for expressing one's thoughts and leading a debate. They learn to speak and give presentations. Students constantly interact with teachers and fellow students. Because there are students whose inability to enter into communication becomes an obstacle for them to nominate their talents.

In conclusion, STEM Sciences is taking its place in the higher education system in the education of gifted students, as is the Noosphere model in the teaching of gifted students, the most popular gift model. As the STEAM training approach was introduced in the people's training 'following in the assessment of the level of knowledge of students: PISA, TIMSS, PIRLS has entered international programs and research. And in higher education , a credit module system for qualifying talented, active, educated students is adopted, in which a+ level determines the highest level.

## Literature:

1. 2021 yil sentyabr. Raqamli transformatsiyaning oliy ta'limni oʻrganish boʻyicha ilovalari. Xose Migel Korreya de Arauxo Freire

2. «STEAM ta'lim texnologiyasidan maktabgacha ta'lim-tarbiya tizimida foydalanish imkoniyatlari» Raxmonova Maftuna Otajon Qizi may 2022

3. Dilyorjon Solijonov Zoirjon oʻgʻli Qoʻqon Universiteti Stem ta'lim tizimi va unda xorijiy tillarni oʻqitish science and eduction scentific journal march2021/volume 2 lessue 3

4. Respublika ilmiy-amaliy konferensiya ISSN: 2181-1776 fan, ta'lim va amaliyot integratsiyasi Gulshoda Ergasheva Dilshoda Boltaboyeva steam yondashuv orqali oʻquvchilarda tayanch kompetensiyalarni shakllantirish "bilig – ilmiy faoliyat" nashri | <u>http://bilig.academiascience.org</u>

5. Texnologiya fanini oʻqitishda STEAM ta'limiy yondashuvi, uning ilmiy- nazariyva amaliy ahamiyati

6. "STEAM talim tizimi nima?" https://www.integer.uz/steam

104	ISSN 2319-2836 (online), Published by ASIA PACIFIC JOURNAL OF MARKETING & MANAGEMENT REVIEW., under Volume: 11 Issue: 12 in December-2022 https://www.gejournal.net/index.php/APJMMR
	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/



7. What is the STEAM education system?" https://www.integer.uz/steam

8 . J.G`.Yo`ldoshev, M.K.Shirinov, F.I.Ochilov "Pedagogik diagnostika" o`quv metodik qo`llanma T.:2014

9. O`tkir Tolipov, Dilnoz Ro`ziyeva "Pedagogik texnologiyalar va pedagogik mahorat" «Toshkent innovatsiya-ziyo» T.: 2019

10. https://hozir.org Iqtidorli o'quvchilarni o'qitish.2022. 1-yanvar

11. https://baxtiyor.uz Iqtidorli o'quvchilar bilan ishlash masalasiga doir mulohazalar. 20dekabr.2020.

12. https://www.fayllar.org 29-aprel 2022 Stem ta'lim. Iqtidorli o'quvchilarni o'qitish.

13. https://fayllar.org 12- noyabr.2021. Iqtidorli o'quvchilarni o'qitish

105	ISSN 2319-2836 (online), Published by ASIA PACIFIC JOURNAL OF MARKETING & MANAGEMENT REVIEW., under Volume: 11 Issue: 12 in December-2022 https://www.gejournal.net/index.php/APJMMR
	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/