



HOW CAN STEM EDUCATION AFFECT TO MODERN INNOVATIVE SYSTEM OF EDUCATION?

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ABSTRACT

The purpose of this article is to show the effects of modern education to innovative education. To accept this new culture, it is necessary to develop new teaching skills that include the student's whole development. The study of how to develop college students with innovative capacity has been at the center of higher education in light of the more ferocious global competition. The three key components of a college student's inventive ability are basic competence, innovative thinking, and innovative acts. According to the aforementioned composition, the cultivation pattern should involve training innovative thinking, learning basic knowledge, and developing inventive skills. The three main components in the development of inventive capacity are classroom learning and practice, independent student learning, and social practice. Additionally, some efficient techniques are beneficial for undergraduate innovative ideas and practices, such as schools offering elective courses on innovative education, teachers doing research on education and teaching, and students using innovative education theories and practical innovative skills in professional settings.

Introduction

The advancement of human civilization is significantly influenced by education. Since the beginning of time, the way that people learn has changed significantly over time and continues to do so as a result of developing technology. However, thanks to the internet and other digital technology, online learning environments are becoming more popular than traditional classrooms. The spatial restriction of a physical classroom has been entirely eliminated by the current educational system, benefiting a wide variety of pupils simultaneously throughout the world. We shall shed some light and talk about Modern Education in this blog. Education provides direction. Without education, you cannot improve your lifestyle or gain worldly knowledge. Education builds confidence and helps you evaluate your capabilities and aptitude. One of the most important reasons why education is important is because it provides direction. Education gives us a road map for approaching life and

enables us to make plans to improve our lifestyle. Without education, people cannot progress in society or make changes to their lifestyles. For example, well-educated people can plan their future by understanding their strengths and weaknesses. Having a good education can open up fantastic opportunities for your career path, allowing you to work towards better jobs and higher salaries. It's much easier – and more enjoyable – to progress in your chosen field if you have the relevant knowledge.

How can STEM education affect to modern innovative system of education?

Thinking Outside the Box this mostly relates to the capacity to think creatively. Inventive thinking, as the heart of inventive abilities, is the ability to think during the creative process. (Li, 1987). That example, the method of thinking can be labeled creative thinking if the outcome is inventive. Novel Initiatives inventive activities, or the capacity to perform creative actions, are exterior behaviors dominated by concepts, and hence fall under the umbrella of inventive practice. The capacity to make original results with individual activities dominated by their inventive thoughts may be considered as a vital aspect of innovative talent.

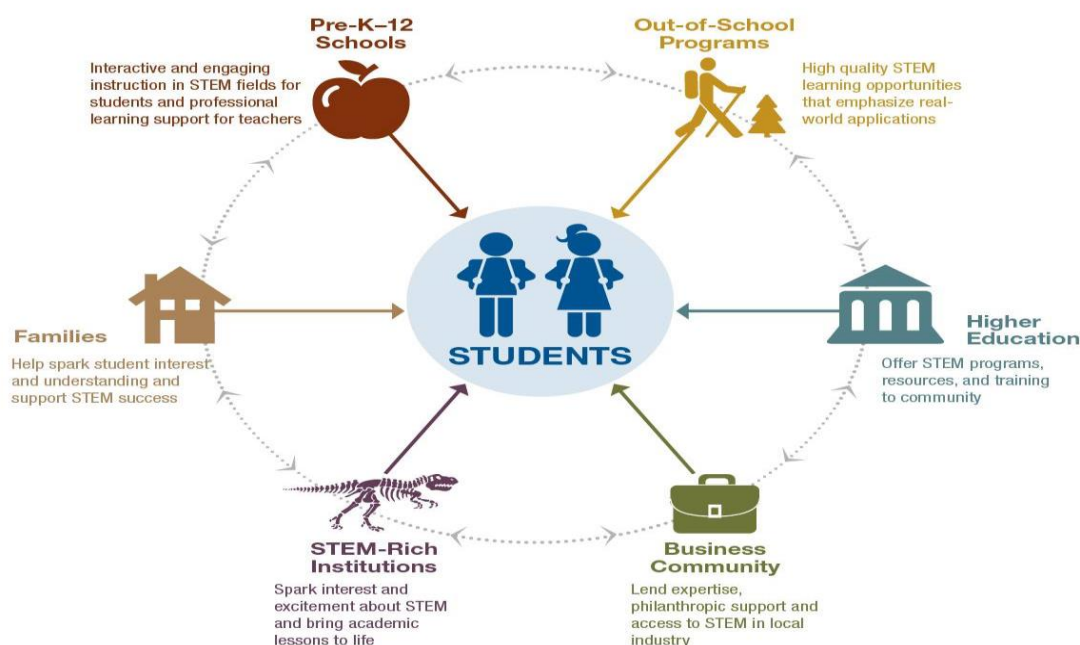
STEM education stands for science, technology, engineering, and mathematics. It is an educational approach that focuses on teaching these four disciplines in an integrated and applied manner. STEM education emphasizes hands-on learning, problem-solving, and critical thinking skills. Its goal is to prepare students to become innovative thinkers and leaders who can tackle complex challenges in the modern world. STEM education is becoming increasingly important as technology continues to advance and shape our lives. It is also essential for preparing the workforce of the future, as many jobs require skills in science, technology, engineering, and mathematics. STEM education stands for Science, Technology, Engineering, and Mathematics. It is an educational approach that focuses on teaching these four disciplines in an integrated and applied manner. STEM education emphasizes hands-on learning, problem-solving, and critical thinking skills. Its goal is to prepare students to become innovative thinkers and leaders who can tackle complex challenges in the modern world. As we move further into the digital age, we are seeing a significant shift in the way we work and live. Technology is advancing at an unprecedented rate, and the need for a skilled workforce that can keep up with these advancements is becoming increasingly important. In this context, STEM education plays a critical role in shaping the future of work and ensuring that we are prepared for the challenges of tomorrow. STEM education is not only about learning science, technology, engineering, and math. It is also about developing a range of essential skills for success in the modern world, including problem-solving, critical thinking, creativity, and communication.

Pros Of STEAM education for increasing innovative education

STEM education encourages students to think outside the box, come up with innovative solutions to complex problems, and communicate their ideas effectively. These skills are crucial not only in the workplace but also in everyday life. STEM education is becoming increasingly important in today's world, as technology continues to advance and shape our lives. The need for a skilled workforce that can keep up with these advancements is becoming increasingly important. In this context, STEM education plays a critical role in shaping the future of work and ensuring that we are prepared for the challenges of tomorrow. By providing students with a strong foundation in science, technology, engineering, and math,

STEM education gives them the tools they need to succeed in the jobs of tomorrow. As technology continues to shape our world, the demand for STEM professionals is only going to increase. STEM education can help bridge the gap in the workforce by encouraging diversity and inclusivity, exposing students to various career paths that they may not have considered previously, and providing them with the necessary skills to succeed in those fields.

STEM Learning Ecosystem



Moreover, STEM education has the potential to contribute to the development of the community as a whole. By encouraging students to explore and understand the world around them, STEM education can help to address real-world problems and create sustainable solutions. In conclusion, STEM education is a critical component of the modern education system. It is not only about learning science, technology, engineering, and math, but also about developing a range of skills that are essential for success in the modern world. By providing students with a strong foundation in these subjects, we are giving them the tools they need to succeed in the jobs of tomorrow. Professional basic ability is primarily acquired by the acquisition and application of professional basic information, more specifically through theoretical teaching and class practice. In the former case, the basic principles of creatology and specific professional courses can be mixed to have educational changes and research on teaching contents, teaching methods, the construction of specialties and courses, and so on, with obvious results; in the latter case, reforms can be conducted in the construction of professional and innovative labs, specific practice, course design, theses, and other practical sections in order to offer a comprehensive education. Innovative basic ability is primarily gained via the acquisition and application of innovative basic information.

Conclusion

In conclusion, STEM education is crucial for the development of individuals and the growth of society as a whole. By incorporating STEM education into the curriculum, we can ensure that we are preparing ourselves and the next generation for a future that revolves around innovative problem-solving and technological advancements. STEM education is not just about learning science, technology, engineering, and math; it is about developing a range of

skills that are essential for success in the modern world.

STEM education has been a topic of interest for many years now as it is considered a key component of the modern education system. The emphasis on STEM education has been growing steadily as technology continues to shape our lives and the world around us. It is essential to teach STEM education in a way that emphasizes hands-on learning, problem-solving, and critical thinking skills. One of the significant benefits of STEM education is that it prepares students to become innovative thinkers and leaders who can tackle complex challenges in the modern world. The world is changing rapidly, and students need to be able to adapt to these changes. STEM education equips students with the skills they need to think critically and creatively, which is essential in the modern world. Moreover, STEM education is crucial for preparing the workforce of the future. Many jobs today require skills in science, technology, engineering, and math, and this trend is only set to continue. By providing students with a strong foundation in these subjects, we are giving them the tools they need to succeed in the jobs of tomorrow. Another significant benefit of STEM education is that it encourages diversity and inclusivity. STEM education exposes students to various career paths that they may not have considered previously and provides them with the necessary skills to succeed in those fields.

This, in turn, can help to create a more diverse and inclusive workforce, which is essential for the growth and success of any organization. In addition to the benefits mentioned above, STEM education has the potential to contribute to the development of the community as a whole. By encouraging students to explore and understand the world around them, STEM education can help to address real-world problems and create sustainable solutions.

References:

1. Publication date 2004 Topics Doodles, Doodles -- Psychological aspects Publisher London : Kandour
2. Teaching and learning stem a practical guide Richard M. Felder Rebecca Brent
3. Kastriti, E., Kalogiannakis, M., Psycharis, S., & Vavougiou, D. (2022). The teaching of Natural Sciences in kindergarten based on the principles of STEM and STEAM approach. *Advances in Mobile Learning Educational Research*,
4. Anggraeni, R. E. (2021, March). The analysis of the development of the SE-STEAM learning model to improve critical thinking skills in natural science lesson. In *Journal of Physics: Conference Series* (Vol. 1832, No. 1, p. 012050). IOP Publishing.
5. https://archive.org/details/childdevelopment0000unse_k3s6/page/n7/mode/2up
6. <https://archive.org/details/sciencepsycholog0000stei>
7. <https://ipa-pasca.unpak.ac.id/pdf/Teaching-and-Learning-STEM-A-Practical-Guide.pdf>
8. <https://oese.ed.gov/2015/11/communities-come-together-to-support-stem-education/>