



# Why STEM Education Is Important In 2023!

**School Box**  
— bringing learning to life —

Why is everyone talking about STEM? Why are parents asking schools about their STEM education? With so much talk about STEM these days, you might be wondering, "Why?" Technology and engineering careers are indeed increasing, but does every student really need to learn STEM skills?

Before we explore four reasons why STEM education is so important in 2023, let's talk about what STEM is.

## What is STEM Education?

STEM is an acronym that stands for science, technology, engineering, and math. K-8 schools have typically concentrated on math and science, but in recent years, some schools have begun to include more technology and engineering instruction. STEM education fields are intertwined with nearly every part of 21st-century life, including phones, apps and even currency such as Crypto. STEM is much more than just looking at numbers and carrying out science experiments in elementary and middle school. When schools seek to include all parts of STEM into their curriculum, children have the chance to discover how what they study applies to the real world and experiment with new ways of thinking.

In an increasingly STEM-driven world, it's more important than ever to ensure our students get a quality STEM education. Here are a few reasons why:

## Fostering Critical Thinking and Problem-Solving Skills

One of the most important advantages of STEM education is that it helps students develop several important skills that they can use for the rest of their lives. STEM encourages students to think critically and independently as they work to solve problems. Critical thinking is an essential skill that students can apply to their future and STEM activities and lessons will help them gain these necessary skills.

# Promoting Creativity and Innovation

By teaching students how to think outside the box and encouraging them to apply their most creative ideas, we are helping them prepare for the ever changing future that requires constant innovation. Some of the greatest inventions came from people thinking outside of the box. We need well-educated scientists to figure out how to control pandemics and develop much-needed medicines. We need creative engineers to come up with efficient clean energy solutions and so much more. Today, creativity is ranked among the top skills businesses look for in the hiring process. Employers want employees who can offer creative solutions when facing challenges.

## Decreasing the gender gap in STEM

In the United States, women make up only 28% of the total STEM workforce, 28% of physical scientists, 24% of computer and information science workers, and 15% of engineers according to the National Science Foundation. Giving all children opportunities to explore STEM from a young age could help reduce the gender gap in STEM fields. In addition, teaching children about inspiring women as well as men in STEM could give more children role models they connect with. STEM is an excellent subject for promoting equality in the classroom since all students can participate in lessons and activities.

## Preparing for a STEM Economy

STEM jobs, especially technology jobs, continue to be an important part of the economy. Typically, STEM occupations offer higher wages and more projected growth over the next decade than non-STEM occupations. STEM careers play a crucial role in driving the US economy which make them an attractive option for students looking to enter the job market.

## Increasing Access to STEM Education

One effective way to increase access to STEM education is through hands-on, project-based learning. According to a study published in the Journal of STEM Education, students who participate in hands-on, project-based learning are more likely to engage in STEM subjects and better understand the material. It allows students to apply their knowledge in real-world situations, making STEM more relevant and meaningful.

STEM is the future for our students and it teaches them important life skills, preparing them to create a better world. It shows them how to approach challenges, think, and work together to create effective solutions. STEM activities and lessons are critical for our students. Let's work together to give students the opportunities they need to succeed! Check out The School Box and the many educational materials available to encourage STEM in the classroom.

Sources:

Schoolbox.com ; stemeducationjournal.springeropen.com ; kitaboo.com; nca.school.org