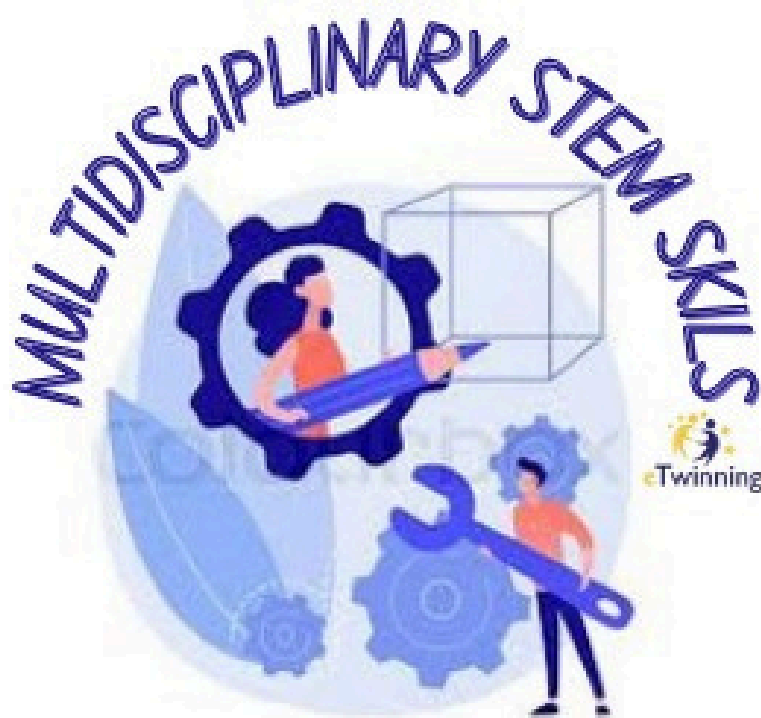


MULTIDISCIPLINARY

STEM SKILLS

*science / technology / engineering /
mathematics*





**MULTIDISCIPLINARY
STEM SKILLS**

12-16
age

PROJECT PARTNER COUNTRIES

		
Poland	Türkiye	Romania
		
North Macedonia	Azerbaijan	Jordan

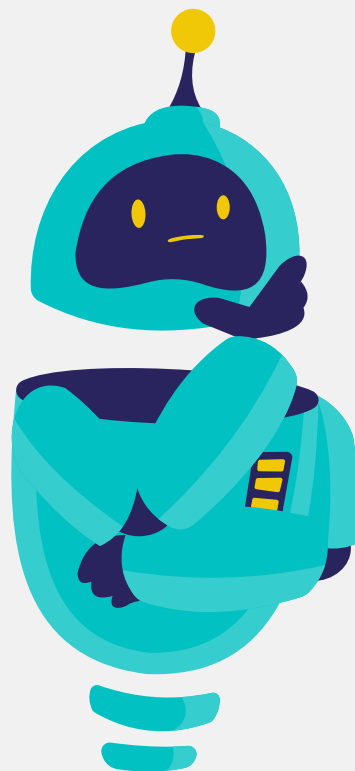
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PROJECT OBJECTIVES:

- 1. To equip our students with 21st century skills*
 - 2. Supporting students' foreign language development*
 - 3. To enable our students to learn and use web2 programs*
 - 4. To ensure that they learn subjects, concepts and achievements by using multiple disciplines*
 - 5. Creating STEM skills, resources, study areas and awareness*
-



THE IMPORTANCE OF MULTIDISCIPLINARY EDUCATION

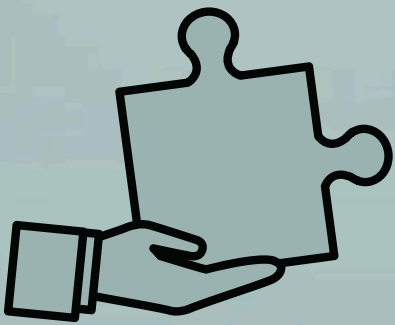


It helps students understand the power of new ideas, and helps develop a pragmatic attitude. It develops a generation of continuous learners. Learning without boundaries helps create more relevant and contextual learners. A deeper understanding of subjects and concepts leads to informed future choices and career.



"Your brain has a capacity for learning that is virtually limitless, which makes every human a potential genius." Michael J. Gelb

It is crucial that our students learn how to think critically and creatively in this day and age, and a multidisciplinary approach is the key to unlocking their full potential



A multidisciplinary approach combines knowledge and skills from several academic disciplines to address complex issues and difficulties. Rather than studying each academic topic separately, a multidisciplinary approach focuses on connecting them.

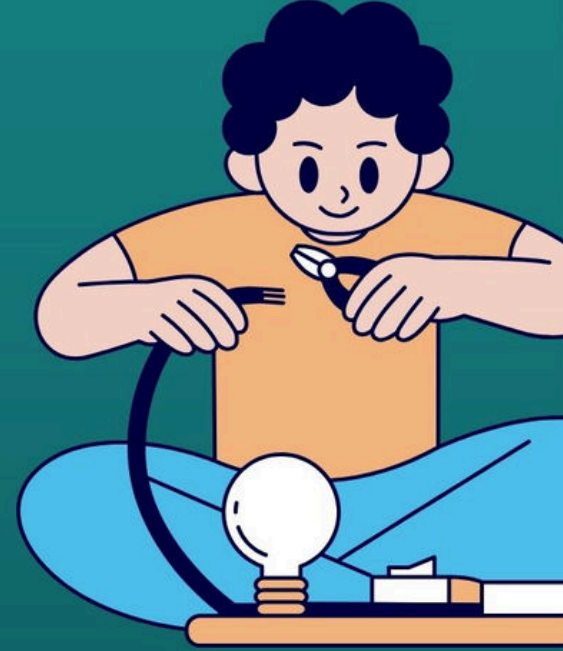




With multidisciplinary learning, a student gains an arsenal of skills as it crosses the boundaries of curriculum to enhance the scope and depth of learning.

THEY DISCOVER HOW TO ESTABLISH CONNECTIONS BETWEEN DIFFERENT DISCIPLINES AND USE THEM IN EVERY FIELD. THEY USE SCIENTIFIC STUDY TECHNIQUES MORE EFFECTIVELY AND GAIN REASONING SKILLS.



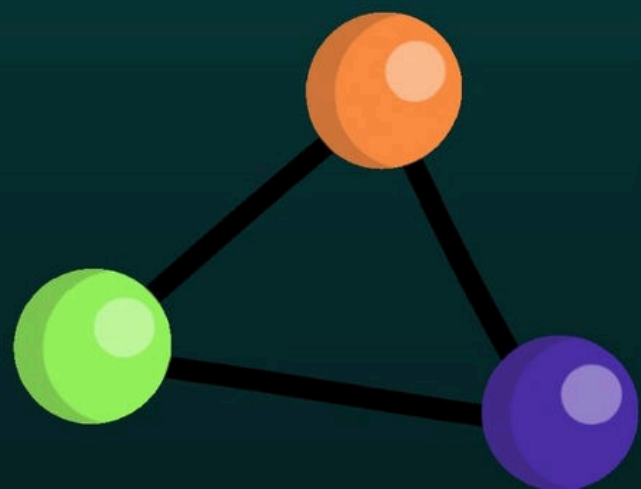


Students can benefit from a multidisciplinary approach in teaching by cultivating a sense of curiosity and a lifelong love of learning. Students that acquire a holistic education are better prepared to deal with real-world situations and are more adaptable to change.

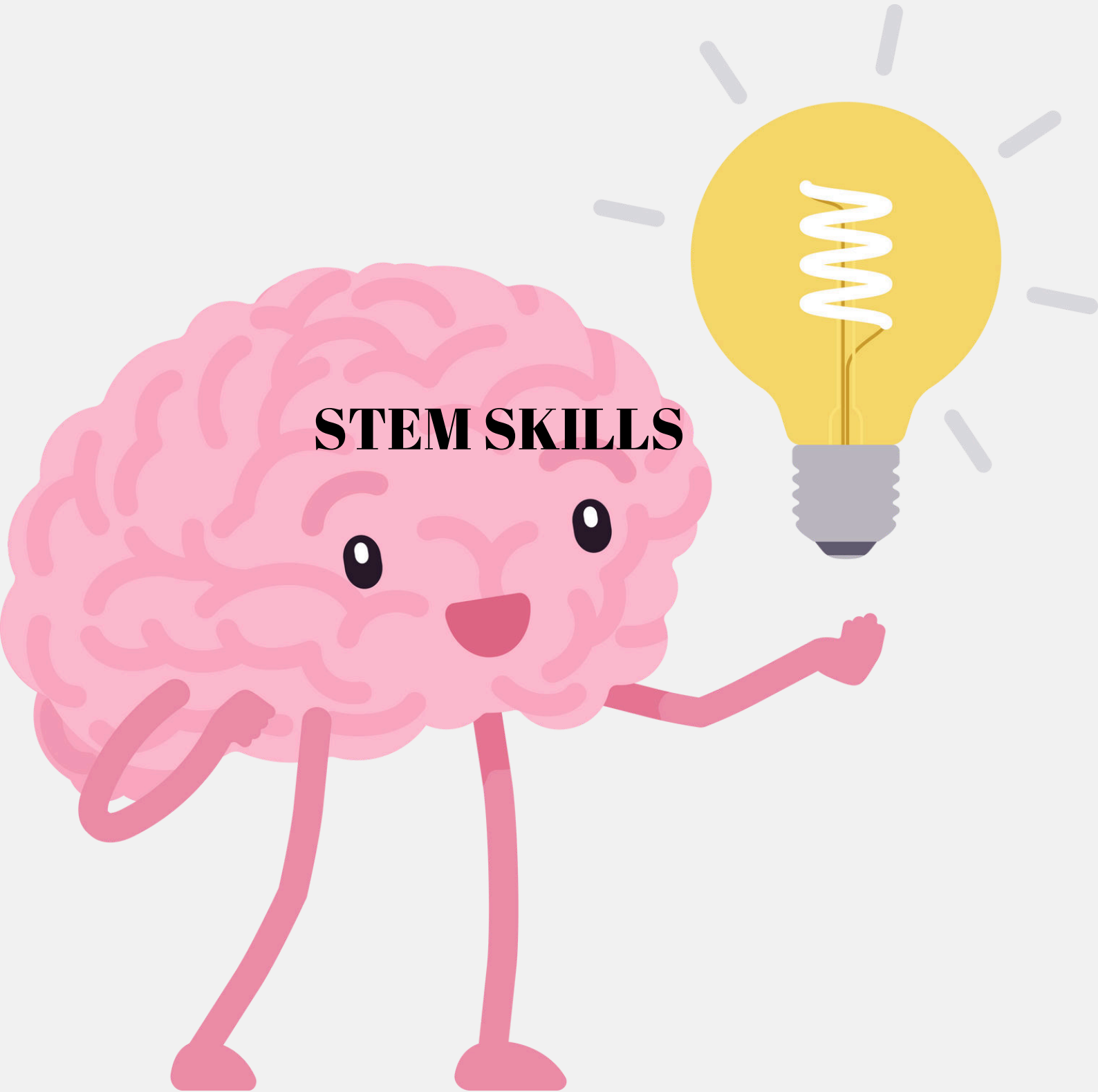
It helps in improving overall performance of students

Develops a sense of curiosity

Students tend to explore more and find their areas of interest.



STEM SKILLS



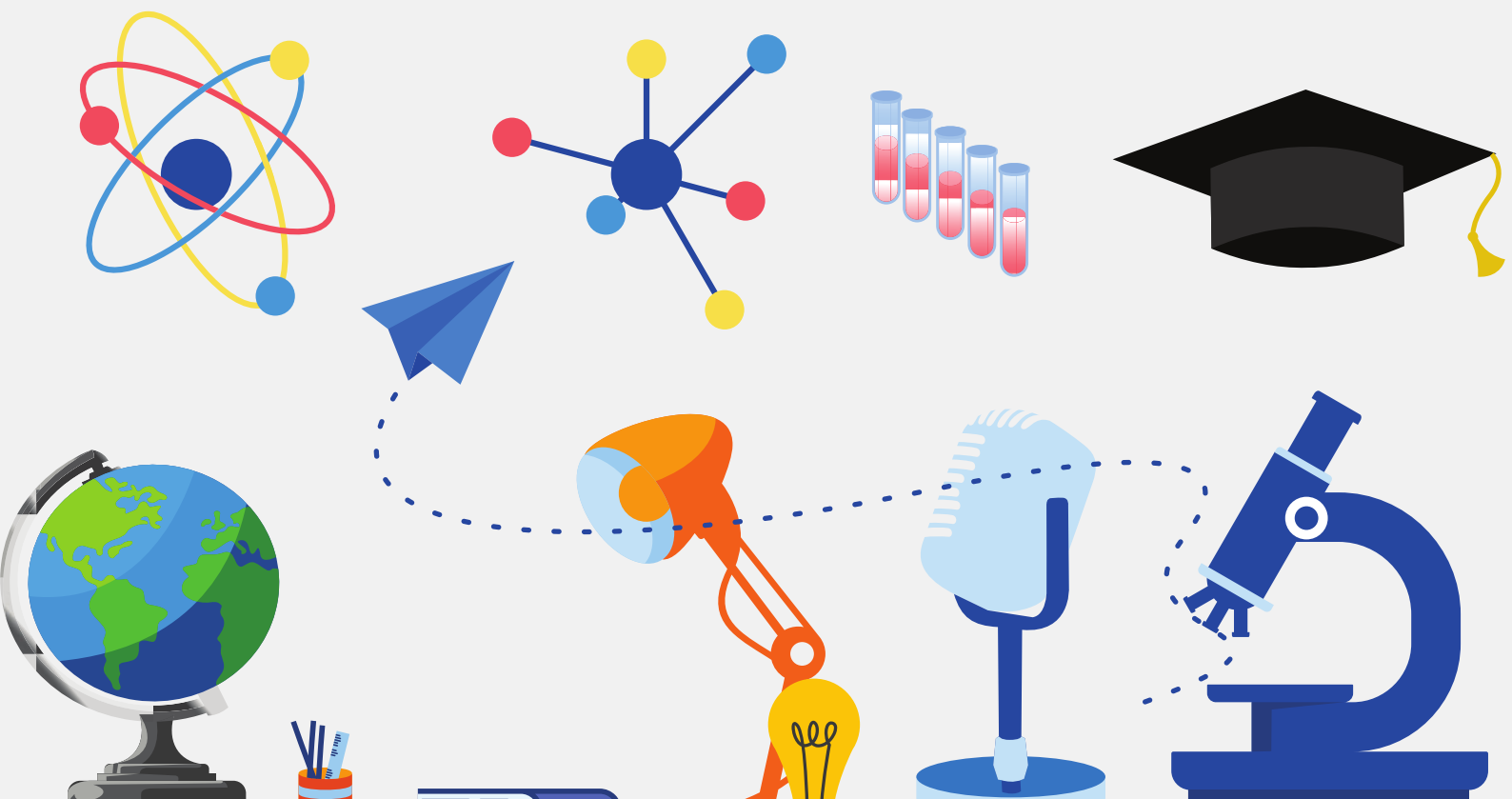
Through STEM, students develop key skills including:

- problem solving.**
- creativity.**
- critical analysis.**
- teamwork.**
- independent thinking.**
- initiative.**
- communication.**
- digital literacy.**

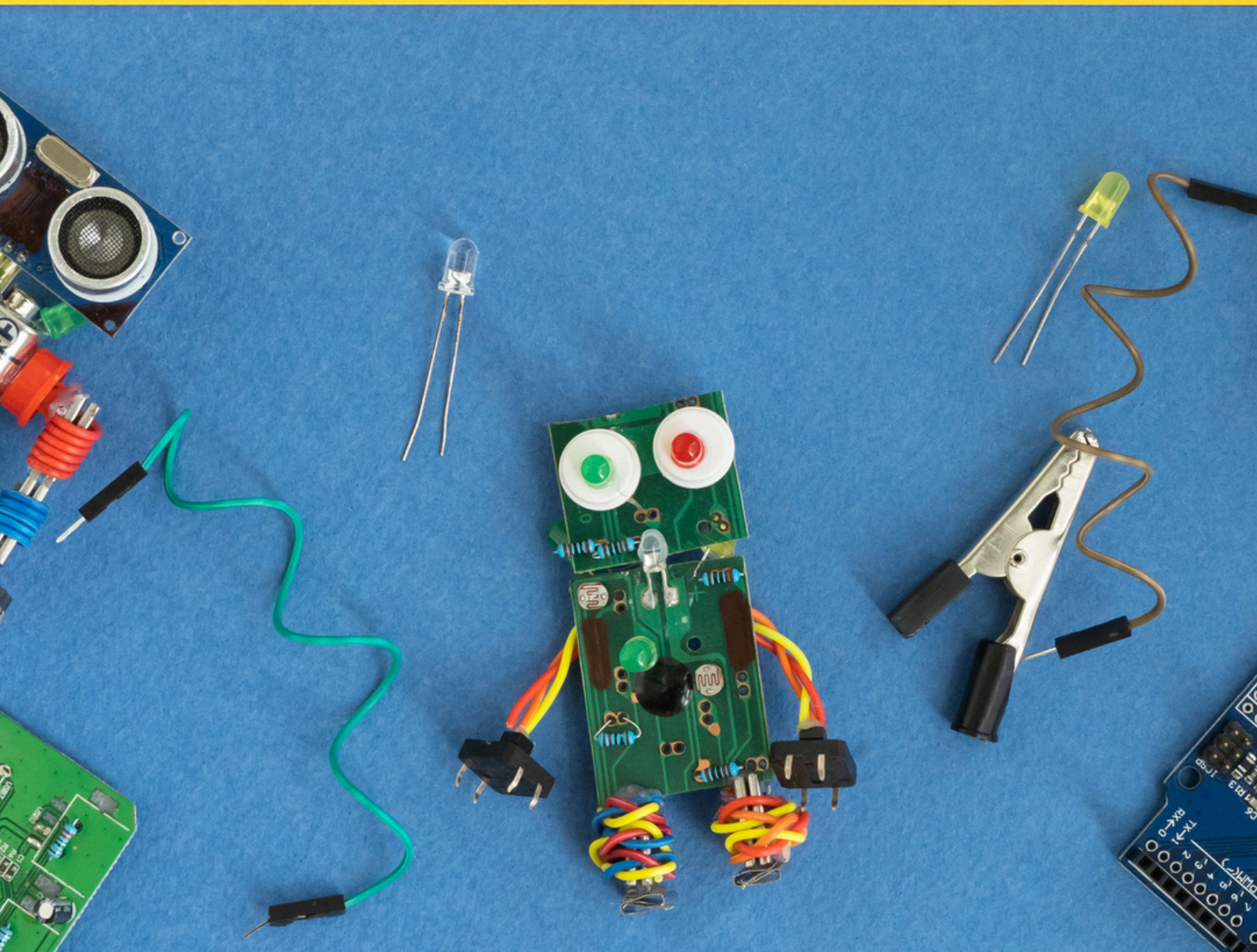




STEM is an educational curriculum that emphasizes the disciplines of Science, Technology, Engineering and Mathematics.



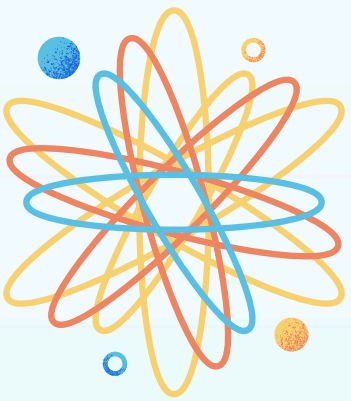
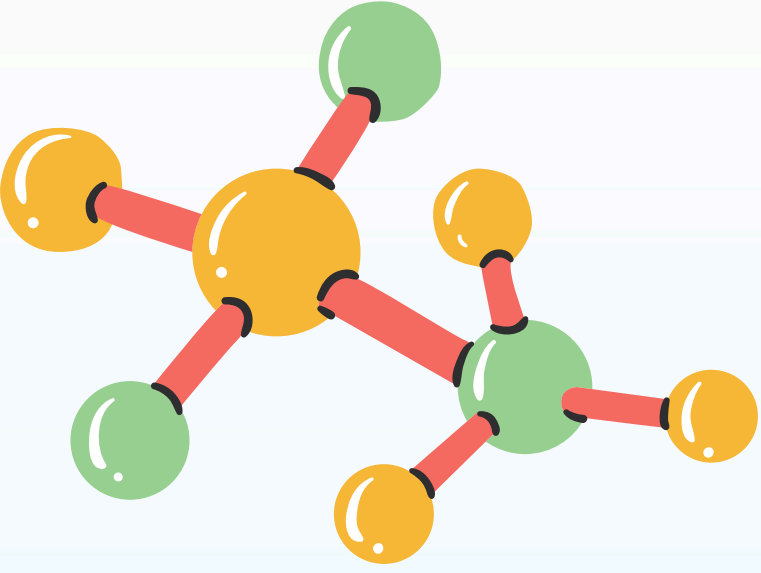
It aims for students to gain skills and knowledge within a holistic educational approach within this interdisciplinary interaction.



It aims for students to look at problems from an interdisciplinary perspective and gain knowledge and skills with a new generation education approach. STEM aims to empower individuals with the skills to succeed and adapt to this changing world.



Students learn by researching and questioning, rather than memorizing. Permanence in learning is ensured because the four disciplines are intertwined and used in daily life.



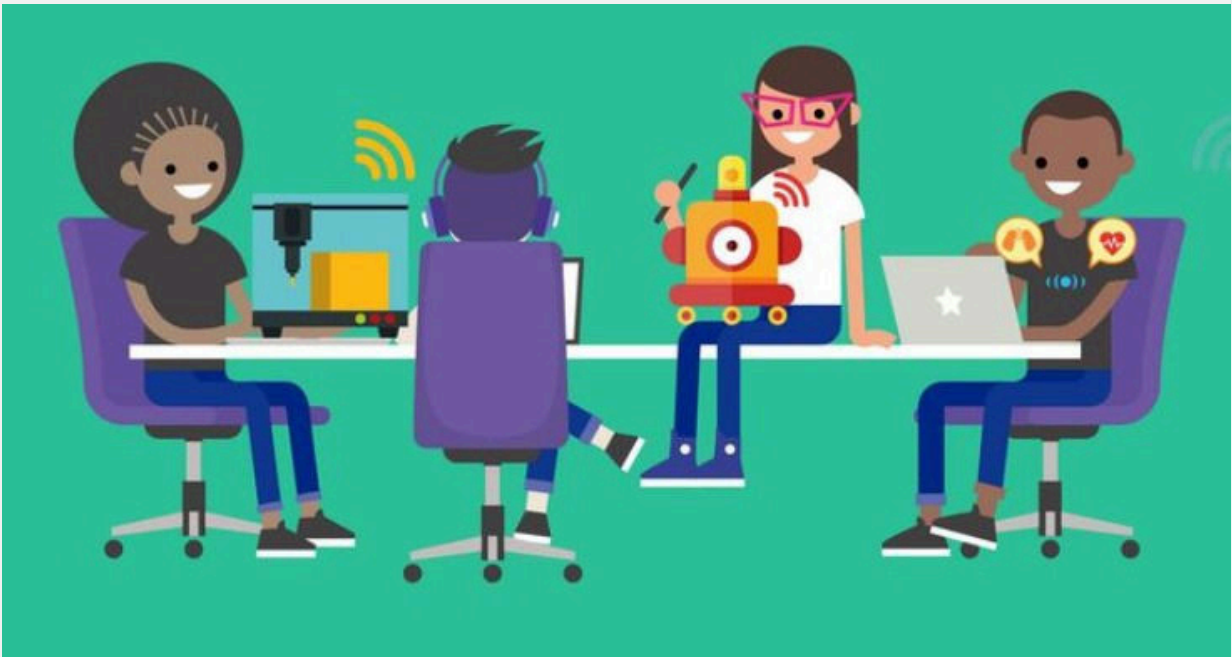
STEM skills are the necessary practical competencies that you need to apply with reliable results in order to be successful in your pursuit of a science-related career.

Some of the soft social skills that you need to develop and improve include good communication and empathy. Working collaboratively on projects will help.



STEM CAREERS





"Science and technology are the pillars of progress, and STEM education is the key that opens the doors to the future."

Neil Armstrong

Science, technology, engineering and mathematics programs open to many different careers.

Some examples are:

***Astronomy**

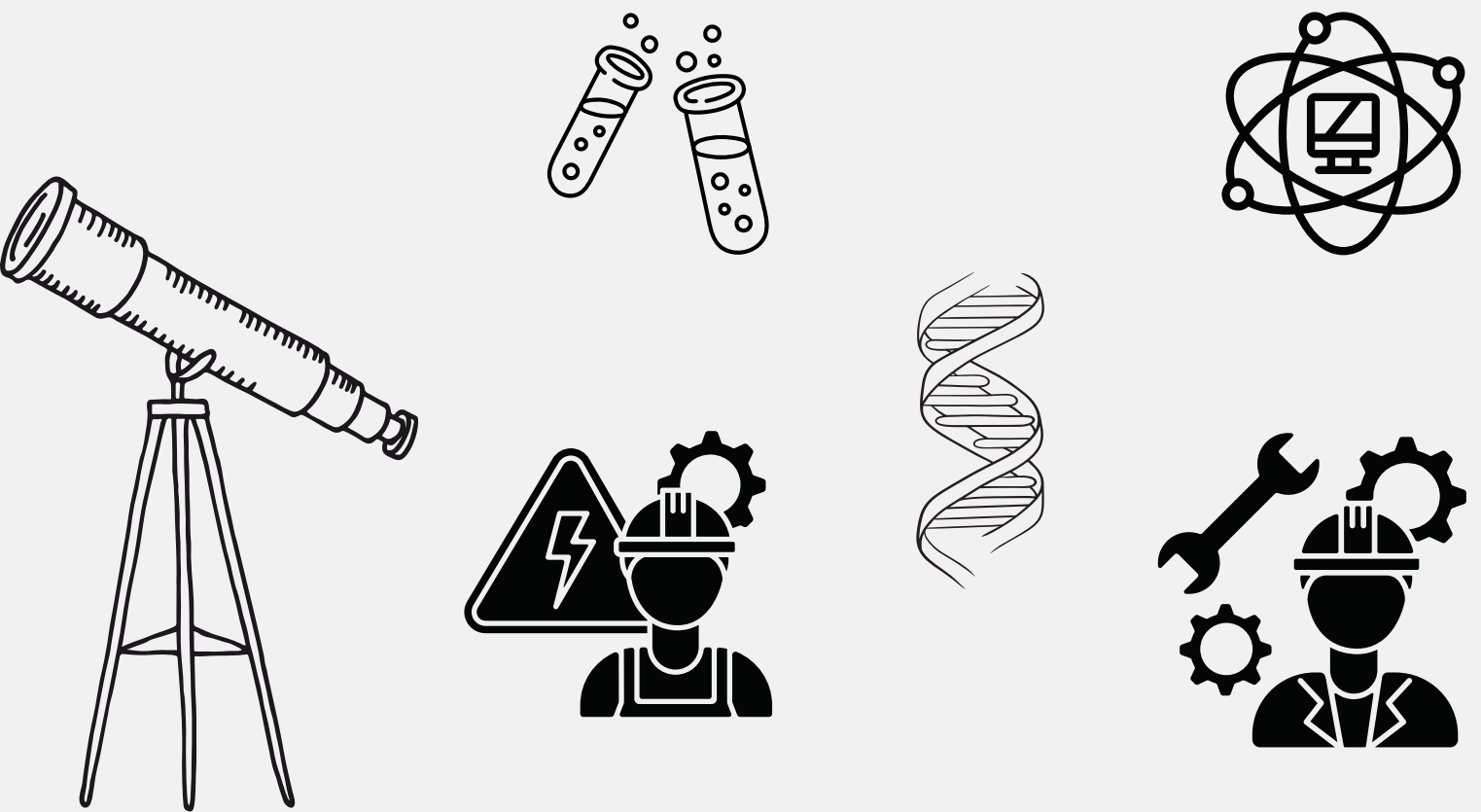
***Biology**

***Chemistry**

***Computer Science**

***Electrical Engineering**

***Mechanical Engineering**



Problem solving is the process of achieving a goal by overcoming obstacles



Teamwork is the ability to coordinate with others to achieve a goal



Critical thinking is the analysis of available facts, evidence, observations, and arguments



Research involves the collection, organization and analysis of evidence to increase understanding of a topic



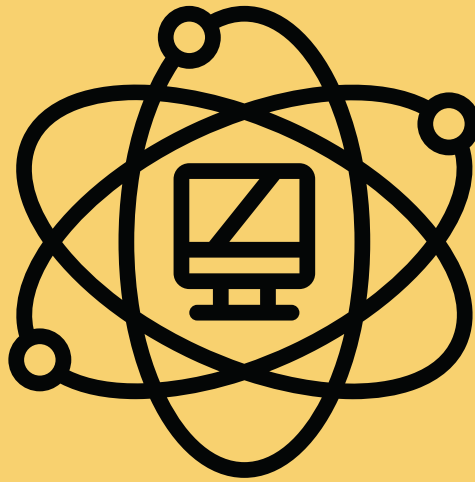
Curiosity is the ability to ask questions about the world and the motivation to seek answers



Collaboration is the process of two or more people, entities or organizations working together to complete a task or achieve a goal.



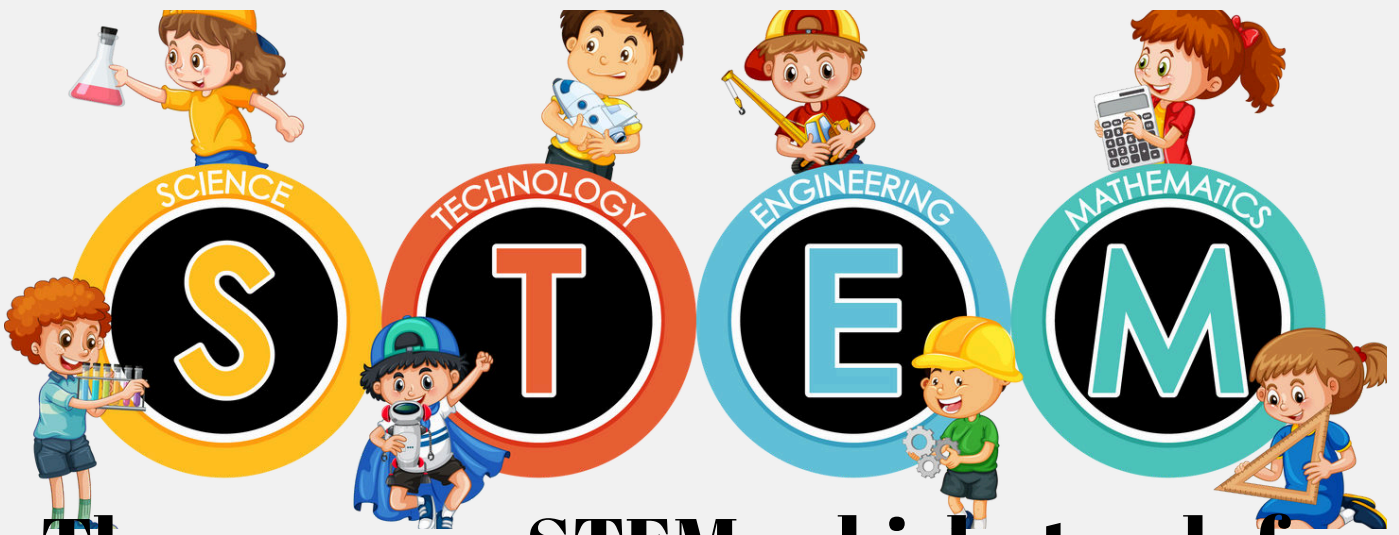
Creativity is a characteristic of someone or some process that forms something new and valuable



Flexibility ... “People are now required to adapt quickly to new demands and new situations. They need quantitative skills to manipulate data well. The mathematics and science skills you are learning in school are the foundation of STEM and must be applied in pursuit of solutions.

Computer and technology skills allow people to use complex technological functions and understand difficult computer applications and software

Adaptability is a feature of a system or of a process. This word has been put to use as a specialised term in different disciplines and in business operations. Word definitions of adaptability as a specialised term differ little from dictionary definitions



The acronym STEM, which stands for science, technology, engineering, and mathematics, refers to an interdisciplinary approach to education that integrates these subjects to give pupils an all-around development.





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