



DEEP GOOGLE RESEARCH



Task Objective

To help dive into complicated data, connecting threads, thereby providing insightful analysis and judgement to obtain a superior analysis.



Task

Research on websites that sell or promote STEM education along with required details.



STEM EDUCATION



ABOUT STEM EDUCATION

In our everyday life, we often see that technology is changing at a very fast pace. Every day there are some new innovations or new ideas which disrupts the old technology which eventually becomes obsolete. Every day is a new learning process for every individual. Due to these fast-paced changes, competition in the market has become very tough. It is a situation of survival of the fittest and the smartest along with the one who can think one step ahead of others. For the school going generation, it is very important that they are used to this type of learning and thinking. Instead of studying everything in Science, Technology, Engineering and Mathematics (STEM) in isolation, the focus is to teach all this incoherence.



This will make them think more rather than just rote learning their syllabus and scoring marks which may affect their livelihood in future.

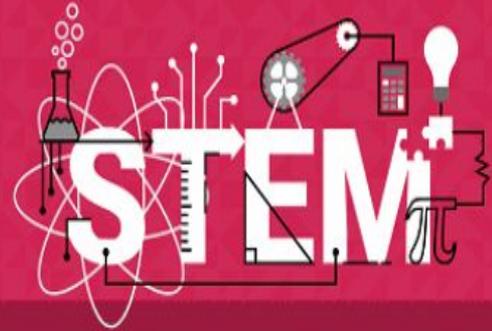
STEM education will enable the power to think logically and critically, analyze the given situation and will give more emphasis on project-based learning which will enable students to get an idea of how actually a project starts, what are the different steps in a project, how taking a correct decision at every step is important, what modifications can be required etc. Science, Technology, Engineering and Mathematic are all interrelated and understanding them together can give a student a better understanding and learning.

TRADITIONAL EDUCATION



VS

STEM LEARNING



RETENTION OF KNOWLEDGE

Traditional classroom education is all about learning by memorization and remembering or retaining the information.



APPLICATION OF KNOWLEDGE

In a STEM setting, knowledge retention is important; but it stresses the application of that knowledge in real life or in future.



COMPENDIUM OF MULTIPLE SUBJECTS

Traditional education covers a general spectrum of subjects without focusing into one or few. Teaching a little bit of everything.



COVERS STEM SUBJECTS IN DETAIL

STEM education aims to spark a lifelong interest in Science, Technology, Math and Engineering, and delve deeper into applications of each.



COURSES ARE SEGREGATED

Traditional education treats subjects exclusively and misses out on how they correlate with each other.



COURSES ARE INTEGRATED

STEM explains to children the interrelations between different subjects and helps them learn through a cohesive approach.



LEARN BY READING

Students learn by reading textbooks, and more recently, online curriculum.



LEARN BY DOING

Students learn by doing experiments and trying out variations of ideas outlined in variable curricula.



REPLICATION OF FACTS

Traditional education begins with a set of known or proven facts, and replicates well-known information to students.



DISCOVERY OF FACTS

The STEM approach encourages students to think for themselves, ask questions, brainstorm, and develop problem-solving skills.



TEACHER-CENTRIC

The teaching process involves an instructor speaking about a topic in the classroom and students taking notes. The teacher governs the flow and direction of information.



STUDENT-CENTRIC

The learning process consists of activities involving props that enable students to see and understand first-hand how things work. They take the lead in exploring and finding answers.



REPITITIVE

Daily education is monotonous, causing students to lose focus quickly. There is no willful or eager participation.



MULTIFARIOUS

A STEM program involves different activities, piquing student interest directly in the sub-topic at hand, and limiting redundancy.



INDIVIDUALITY

There's not much teamwork except for certain projects.



TEAMWORK

There are groups and teamwork involved in most activities.



LIMITED FEEDBACK

Students don't get detailed feedback on learning better and how to improve their scores.



CONSTANT FEEDBACK

Students get real-time feedback on their knowledge of subjects and direction of projects.



ANSWER-FOCUSED ASSESSMENT

Assessment is by a process of written or online examination involving the same set of questions asked to all students.



ACTIVITY-FOCUSED ASSESSMENT

Understanding of the subject is more valued, with experiments and activities conducted.



MEMORY WINS

Success in examinations depends on how good students have memorized lessons.



PERFORMANCE WINS

Success and grading depend on the understanding and performance of tasks.





Following are the websites which promotes and sell STEM education products:

SAM Labs

SAM Labs offers innovative courses to teach STEAM and coding with confidence. Our easy-to-use solutions, developed for specialist and generalist teachers alike, enable students to conduct experiments, solve problems and design prototypes. Our kits include practical curriculum-aligned courses, Bluetooth connected hardware blocks and interactive software – ready-made to master computational thinking.

WEBSITE - <https://samlabs.com>

Both SELLER & PROMOTER

BEST PRODUCTS - Steam Course, Learn to code course, Maker speciality, Creators speciality, and Curriculum progression.



Makey Makey

Makey Makey started out as a project that was initiated by two students at MIT Media Lab under the advisorship of Mitch Resnick and is an academic and artistic project. Now it's both a business and a project with thousands of community collaborators, with more joining the ranks of inventors everyday.

WEBSITE - <https://makeymakey.com>

Both SELLER & PROMOTER

BEST PRODUCTS - Makey Makey Classic, Makey Makey GO, STEM Pack - Classroom Invention Literacy Kit



Sphero

Sphero makes undeniably cool, programmable robots and STEAM-based educational tools that transform the way kids learn, create, and invent through coding, science, music, and the arts. The Sphero ecosystem of tools and content gives kids, teachers, and parents of all learning and coding abilities a blank canvas to solve challenges at home, in school, and beyond.

WEBSITE - <https://sphero.com>

Both SELLER & PROMOTER

BEST PRODUCTS - Sphero Mini App-Enabled Programmable Robot Ball, Sphero AFB01USA Star Wars Force Band, Sphero Mini at-Home Learning Starter Kit, Original BB-8, R2-D2 App-Enabled Droid