



PREPARE YOUR STUDENTS FOR LIFE WITH STEM/ STEAM SOLUTIONS

80% of jobs in the next decade will require technology skills, making it more important than ever for students to be equipped with the knowledge and skills to solve tough problems, gather and evaluate evidence, and make sense of information. These are the types of skills students learn by combining Science, Technology, Engineering, Arts and Math - **subjects collectively known as STEAM.**

Over the years as experts have tried to formalize STEM and STEAM standards, it's very clear that in order to be effective, learning needs to be more hands-on and include problem solving. Two decades of product innovation later, there are now hundreds of options available to you and your STEM/STEAM classrooms.



As more and more schools adapt their curriculums and embrace new technology to support it, it's helpful to look at STEM/STEAM solutions with the mindset that it isn't about addressing one letter of the acronym at a time. These topics are woven together to ensure their real world application. A good STEAM solution will integrate the concepts of Science, Engineering, Math, and Art using the tools of Technology- all while helping students to develop 21st century skills like collaboration, teamwork, critical thinking, problem solving, creativity and imagination.

Coding:

A key topic that incorporates Science, Technology, Engineering, Math and even Art. Lessons are easily taught in the classroom then run on smartphones, tablets, and laptops. Modules range from programming LED light boards, creating custom navigation paths for robots or drones, or even automating a skyscraper build in Minecraft for Education.

Digital Art:

Easily supported in the STEAM classroom with variety of dedicated graphics tablets and standalone precision art pens on Windows and Chrome devices. A great example here would be students learning the fundamentals of design, coding websites, creating the images for the site, and combining math to ensure they are using the most optimal resolution of pixels per inch for the responsiveness of its display.

3D Printing, Makerspaces & Robots:

A combination of a science lab, woodshop, computer lab, and art room. Makerspaces provide hands-on, creative ways to encourage students to design, experiment, build, and invent as they deeply engage in science, engineering and tinkering. This space becomes a fantastic way to start working STEM into your school - either directly into the curriculum, through revolving special programs, or as part of an afterschool workshop. In fact, the National Afterschool Association alone has a ton of great content available, from lesson plans known as STEM/GEMS to a full module-based afterschool Tech Toolkit!

Real-world problem solving is at the heart of the STEM and STEAM initiative, helping to prepare K-12 students for college, careers and a lifetime of creative thinking. If your school is ready to take the next steps to integrate STEM and STEAM technology into your existing curriculum, contact us today!