

The key to students' success is not only to learn science, technology, engineering, and math, but also to understand how those disciplines apply to the world around them. Students need to develop the critical skills that will prepare them for beyond the classroom, empowering them to become tomorrow's engineers, scientists, mathematicians, researchers, innovators, and more.

MimioSTEM solutions open the door to inquiry-based learning in all four STEM fields: science, technology, engineering, and mathematics. Consistently, simply, and quickly make STEM part of your everyday lessons with Labdisc - our all-in-one portable STEM lab, Mimio MyBot Recruit robotics and coding, and Robo 3D printers. Each of our MimioSTEM solutions are coupled with MyStemKits, K-12 STEM curriculum, that provides all of the assembled resources you need to use your STEM products successfully and effectively in your classrooms.





## Why **STEM** Matters

The significance of STEM for students cannot be overstated - STEM equips them with fundamental skills necessary for success. Students learn most effectively when teaching reflects the real world. Using STEM to solve everyday challenges helps students gain a deeper understanding of the world around them.







## **STEM FACTS**

In the USA, out of 158K total occupations, 10K+ are STEM occupations.

During the next decade, the United States' demand for scientists and engineers is expected to increase >10%.

We need STEM in K12 Education because the skills and expertise for STEM occupations typically require at least a bachelor's degree.





## How to Create Engaging **STEM** Experiences

STEM encompasses some of the most dynamic and interesting subjects in schools. STEM-based learning will help create tomorrow's educators and innovators and keep us competitive in a global economy.



## Keys to successfully implementing STEM

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### **Inspire Problem-Solving**

STEM activities should be roll-up-your-sleeves learning. Ideally, students will collaborate and solve the problems together, and gain a more involved and deeper understanding. Karen Worth, a senior researcher and longtime science educator at Education Development Center (EDC), points out that hands-on learning is not "simply manipulating things." Rather, it is "engaging in in-depth investigations with objects, materials, phenomena, and ideas, and drawing meaning and understanding from those experiences."

This will be a wonderful way to obtain some of the hands-on tools that generally prove too expensive for a small school like ours to typically have access to, which will definitely enrich the educational experiences of our students."

Elizabeth Wyatt, Exceptional Student

Education Teacher

The True Value of Technology

Use it or create it! Using technology means more than just presenting a lesson on an Interactive flat panel (IFP) or using a document camera. Bringing technology into a lesson adds value and takes it to a new level. The Labdisc portable STEM lab allows students to measure their world, analyze real-time data samples, and develop a skilled scientific response, while our Robo 3D printers allow teachers to print engaging manipulatives and allow students to engineer custom solutions.

Real-World Learning

Our STEM lessons revolve around real-world problems, allowing students to generate practical solutions. STEM inspires students to ask big questions and seek meaningful answers. What does the data you collected reveal about the environment? How can you engineer a safe water filtration system for someone after a hurricane? How do robots use sensors to collect information about their surroundings while exploring Mars?

Teamwork & Design-Thinking

Integrating teamwork and the engineering design process is instrumental for solving problems. The process is cyclical - repeated as needed to reach the desired solution. The key aspects of this process for students are the importance of teamwork, the need to be creative, and the open-ended nature of the work. Our collection of STEAM Design Challenges develops the design-thinking process.







# STEM solutions for the modern student

Our MimioSTEM offerings provide a selection of standalone solutions that each address a different aspect of STEM education: 3D printing, robotics, and data analysis. Select one or all to suit your needs. Each of our STEM solutions offer a variety of lesson plans specific to each product as well as integrated ones that combine different tools, enabling interactive and interdisciplinary activities perfect for the modern classroom! All curriculum is available through one comprehensive platform: www.MyStemKits.com.

Boxlight provides services, software, and classroom technology to facilitate various types of learning. Whether it's whole-class instruction, small-group collaboration, or STEM-based learning, teachers can enhance student outcomes and foster essential skills. These skills include critical thinking, collaboration, communication, and creativity, which prepare students for life beyond the classroom. As a result, they are empowered to become tomorrow's STEM thought leaders!

## 3D Printing

- Easy to Use
- Safe
- Cloud Printing
- Lesson Plans





## **Robotics and Coding**

- Programmable Screens and Onboard Sensors
- K12 Coding Software
- Lesson Plans

### Portable STEM Labs

- Up to 15 Built-in Sensors
- Auto-Calibrated
- 15-Hour Battery Life
- Lesson Plans





## **MyStemKits**

- Standards-Driven
- 450+ Lesson Plans
- 3D Printed & Virtual Kits
- Included with all MimioSTEM Solutions

Want to learn more about MimioSTEM Solutions? Visit boxlight.com/STEM.



by Boxlight®









- Turn-key and ready to use right out of the box, with tutorial videos to make it easy for even beginner users.
- Fully enclosed 3D printers with HEPA filter for safety in classrooms, makerspaces, and libraries.
- Wi-Fi + Hot Spot enabled for Chromebook and iPad compatibility including Robo cloud printing.
- Print directly from Tinkercad.
- Lifetime customer support and an extended 2-year warranty.
- Includes an online training certification course and spare parts pack.
- Includes a Starter Plan to MyStemKits, the curriculum platform for all your MimioSTEM solutions. Find hundreds of standardsdriven lessons, STEAM Design Challenges, and ready-to-3D print models that can be sent directly to your printer.

## THE BEST WAY TO **INCORPORATE 3D PRINTING** IN YOUR CLASSROOM

Robo 3D printers are built for educators with an easy-to-use interface, compatibility with Google Chromebooks and Apple iPads, & lifetime customer support.

Complemented by professional training and an extensive range of STEM lesson plans.



### **Awards**













Want to Learn More About Robo 3D?

Visit mimiostem.com/3d-printers







## AN INNOVATIVE PLATFORM TO LAUNCH ROBOTICS IN THE CLASSROOM. READY. SET. CODE.

Mimio MyBot Recruit connects learning about robotics with real-world applications. Our intuitive and accessible system helps students develop core skills in programming, engineering, and robotics. Our educational robotics solution facilitates learning and ignites a passion in students with the freedom and flexibility to code.

- The Recruit comes equipped with sensors for advanced coding that detect objects, light, color, direction, and magnetic fields.
- Robotic controller does not require any special software or cables to connect with the student workstation. All you need is a browser to start learning.
- Intuitive and easy-to-use interface.
- Includes a Starter Plan to MyStemKits, the curriculum platform for all your MimioSTEM solutions. Find hundreds of standards-driven lessons!

Mimio MyBot Recruit is a flexible system that encourages creativity and exploration. With a programmable screen, various coding interfaces, and a powerful array of on-board sensors, this bot can scale from Kindergarten to high school. Includes a Starter Plan to MyStemKits curriculum library for math, science, and coding applications.

## Floor Maps

Let your Recruit explore the universe with fun floor mats.



Want to learn more about Mimio MyBot Recruit? Visit mimiostem.com/robotics





## Lawisc Portable STEM Labs



## A STEM LAB THAT CAN GO ANYWHERE, WITHOUT COMPLICATED EXPERIMENT SETUP.

- Wireless, compact data logger for every science, with up to 15 built-in sensors. Clear the clutter with a single device!
- Up to 150 hours of battery life makes it a practical tool for inside or outside the classroom. The ideal solution for long-term experiments such as plant growth, weather change, and pollution.
- Ever ready with zero setup time, automatic sensor testing, and calibration — maximizes valuable lab time.
- Includes a Starter Plan to MyStemKits, the curriculum platform for all your MimioSTEM solutions. Find hundreds of standardsdriven lessons!

The Labdisc portable STEM lab opens the door to inquiry-based learning in a variety of science fields, including biology, chemistry, physics, environmental science, as well as mathematics. With Labdisc, take the classroom anywhere! Labdisc helps students connect and engage with real-world problems by collecting data from wherever they are.



























Visit mimiostem.com/labdisc









## MAKING STEM LEARNING IMPACTFUL WITH STANDARDS-DRIVEN CURRICULUM, EDUCATIONAL 3D MODELS, & VIRTUAL STEM KITS.

- 450+ K-12 Lesson Plans plus 30+ Design Challenges spanning STEAM-related topics for all of your MimioSTEM tools: 3D printers, sensors, and robots. Plus, a custom library of virtual STEM kit simulations.
- Standards-driven curriculum developed by a leading research university aligned to NGSS, Common Core, and State Standards in every lesson.
- Over 230 ready-to-3D-print kits designed for classroom use.
- 3D-printer management tools compatible with 75 types of printers.
- Teachers can browse content by product, subject, and/or grade level, or search by standard. EASY!
- MyStemKits lessons include teacher guide, standards-alignment, student handouts and assessments, ready-to-print 3D models, and programming or design procedures, as applicable.

## **EDUCATIONAL TECHNOLOGY**

A tool is only as good as its uses. Put your MimioSTEM products into action using lessons from this award-winning comprehensive platform. Find ready-touse curriculum for your products so you can start confidently on day one.

### **Awards**













Want to Learn More About MyStemKits?

Visit mimiostem.com/mystemkits

