

2018 STEM Initiatives Catalog

Teq

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ONLINE PROFESSIONAL
DEVELOPMENT

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In this catalog, you will find an overview of our top technology products. If you'd like to learn more about a specific product, service, or offering, please **contact your dedicated account executive or call 877.455.9369.**



A letter from the CEO

Dear Customer,

Teq is an innovative learning company with over forty years experience in technology integration. As the largest interactive whiteboard dealer in North America, we've quickly evolved into a national edtech company specializing in the fusion of technology and learning.

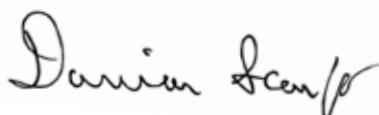
Our mission is to support outcomes by evaluating and delivering products and services for the educational environment. We are dedicated to providing dynamic professional development and instructional support to educators.

As you can see from our catalog, we deliver a complete solution for creating rich, dynamic learning spaces and supporting the needs of today's students, teachers, and administration.

From our inception, Teq has focused on delivering positive outcomes and experiences for our customers. We are committed to providing excellence and believe in true partnership with all stakeholders who have a passion for advancing the learning experience.

I love hearing from our customers and welcome any questions or comments you may have. Feel free to email me at damian@teq.com

Warm Regards,



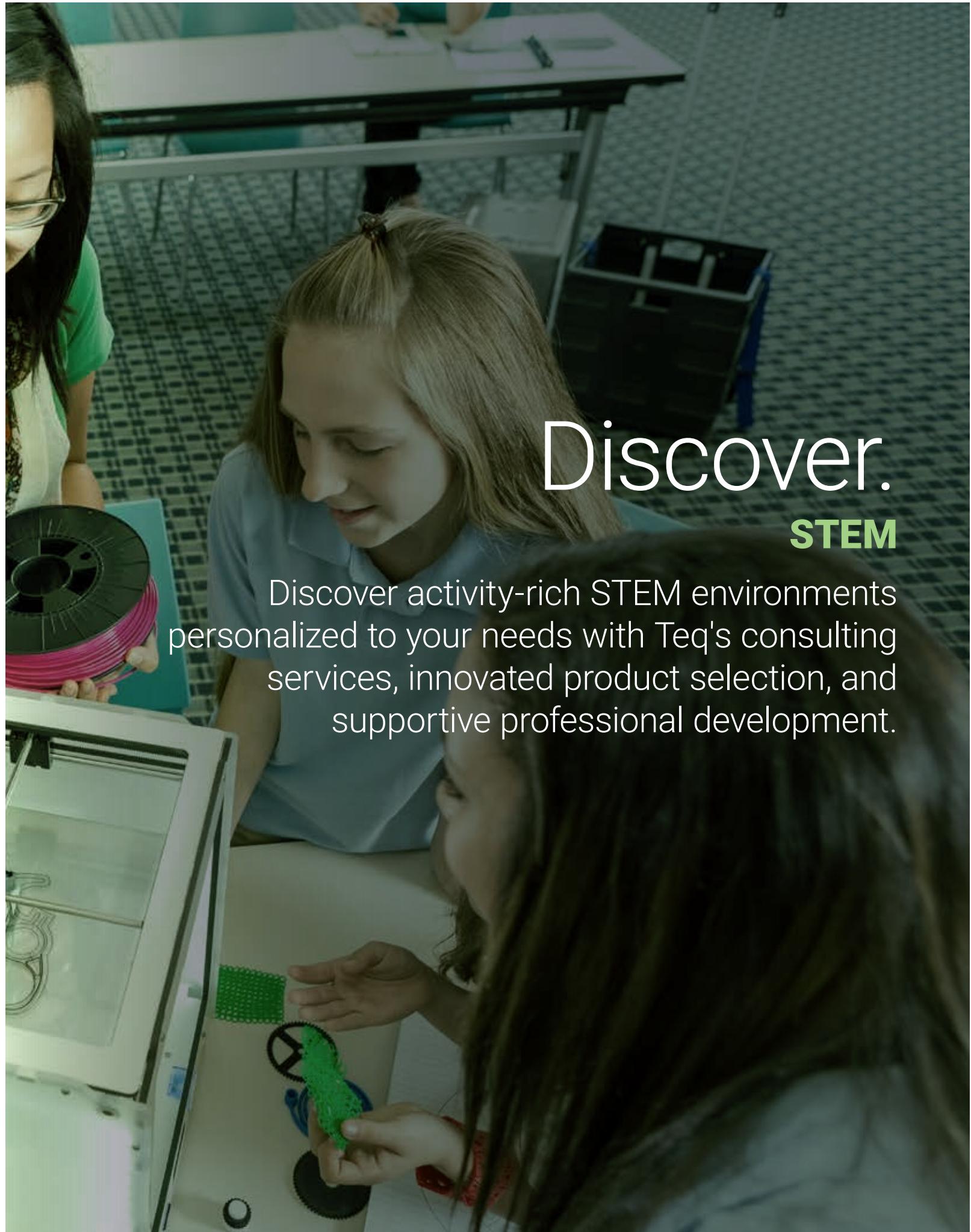
Damian Scarfo
Chief Executive Officer
516.922.3508





Discover. **STEM**

Discover activity-rich STEM environments personalized to your needs with Teq's consulting services, innovated product selection, and supportive professional development.





pi-top

The **future** of STEM education.



pi-top

pi-top is a build-it-yourself laptop powered by the Raspberry Pi. It is the perfect tool to help you start learning how to code, create awesome devices, and take your knowledge to the next level.

The pi-top computer kit comes with:

- pi-top PCB hubs
- Inventors kit for creating computer science and electronics inventions
- 14" HD screen/monitor
- Sliding keyboard
- 8h smart battery
- Personalized injection molded case
- Customizable acrylic slice for easy access
- Free pi-top OS software
- Free CEED Universe educational game
- Illustrated instructions
- Raspberry Pi 3 (Optional)

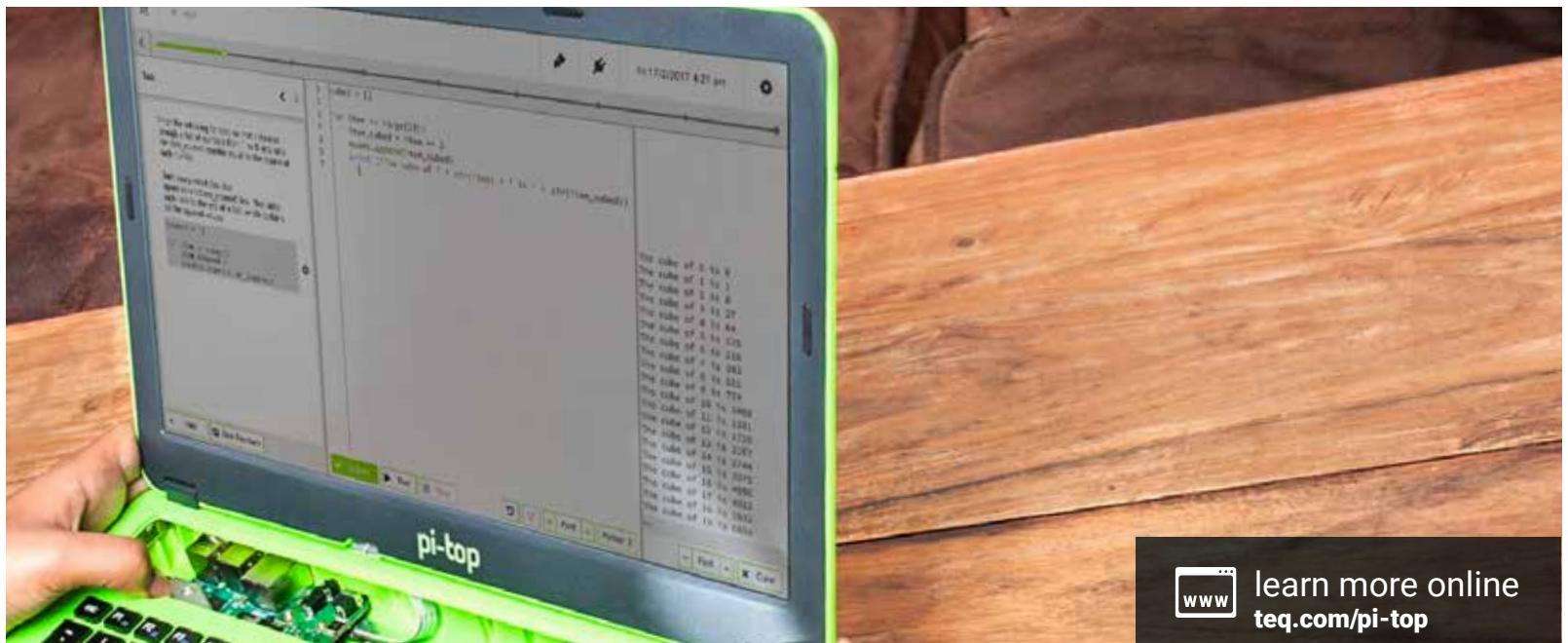


pi-topCEED

pi-topCEED is the easiest way to use your Raspberry Pi in a slimmer form and pre-assembled with all required software installed. Join hundreds of code clubs and classrooms using pi-topCEED as their solution to Computer Science and STEAM based learning.

The pi-topCEED comes with:

- pi-top PCB hub
- 14" HD screen/monitor
- Adjustable hinges
- Personalized injection molded case
- Customizable acrylic slice for easy access
- Lots of cables: HDMI, USB to micro USB, USB to 4p and power supply
- Free pi-topOS
- Free CEED Universe educational game
- Illustrated instructions
- a Raspberry Pi 3 (Optional)



learn more online
teq.com/pi-top



pi-topOS

The pi-top and pi-topCEED are accompanied by pi-topOS which contains pi-top's coding environment and educational game. pi-topOS features an intuitive interface that delivers engaging lesson plans and fun learning based apps. pi-topOS also features:

- **pitopCODER**- Learn to code, create physical computing projects and track your progress and even test your code in real time!
- **Scratch**- A programming language that is easy to understand and use, it's great for children to start learning and create rich programming projects.
- **CEEDuniverse**- You'll need to solve visual programming puzzles to unlock areas of the game. You can even convert your visual program straight to Python code
- **Minecraft PI Edition**- Minecraft is a great way to learn python and a free version is available for the Raspberry Pi. Write commands and scripts in Python to build things in the game automatically.
- A variety of other apps including Google Apps, YouTube, and Libre Office.

pi-topCLASSROOM

Manage classes, alter lesson plans or create your own and track student progress in this simple web app. pi-topCLASSROOM features:

- A Lesson Planner
- Student Analytics
- Custom Curricula
- World Class Content



We believe electronics is more than a hobby or a career path; it's a creative medium for advancing teaching and learning. When students are free to invent and create, they begin to see technology as a means for solving real-world problems and taking their learning to the next level.

SparkFun's ready-to-implement bundles are designed to develop foundational, foster intermediate, and nurture advanced electrical prototyping and coding/programming skills.

Beginner Electronics Bundle (Grades 2-4)

Learn the basics of circuits and programming with this hands-on, project-based learning (PBL) Sparkfun Bundle.

Bundle includes:

- SparkFun Pico Board Starter Kit
- SparkFun Digital Sandbox
- micro:bit Go Bundle

**5-student, 20-student, and Professional Development options available.*



SparkFun Digital Sandbox

Intermediate Electronics Bundle (Grades 5-9)

Increase your student's electrical prototyping and coding/programming skills with the Intermediate Electronics Bundle. Students build on the skills developed with the Beginner Bundle and move on to developing mechanical and robotics knowledge.

Bundle includes:

- Micro:bit kit ecosystem, micro:climate kit
- Micro:bit kit ecosystem, micro:arcade kit
- SparkFun Inventor's Kit for micro:bit
- SparkFun Inventor's Kit
- SparkFun Inventor's Kit Parts Refill Pack
- SparkFun Tinker Kit
- Redbot

**5-student, 20-student, and Professional Development options available.*



SparkFun Inventor's Kit for micro:bit



Advanced Electronics Bundle (Grades 9-12)

Building on the skills developed with previous kits, students will take their electrical prototyping and coding/programming skills to the next level with the Advanced Electronics Bundle.

Bundle includes:

- Raspberry Pi Starter Kit
- Inventor's Kit for Photon
- Johnny Five Inventors Kit
- Full day of set up and Professional Development (with 20-student package)

*5-student or 20-student options available.



Johnny Five Inventors Kit

SparkFun Books

Designed as hands-on learning tools to help today's students build skills for the creative and digital economy — critical thinking, collaboration, communication, curiosity, problem solving and invention.

Available titles include:

- The SparkFun Guide to Processing
- The SparkFun Arduino Inventor's Guide
- SparkFun Arduino Workshop





zSpace®



An all in one **virtual reality computer.**

zSpace

zSpace technology combines elements of VR and AR to create lifelike experiences on the computer that are immersive and interactive.



Lightweight and sleek: With its thin metal frame, the zSpace glasses provide an experience so natural, you will forget you are wearing glasses.

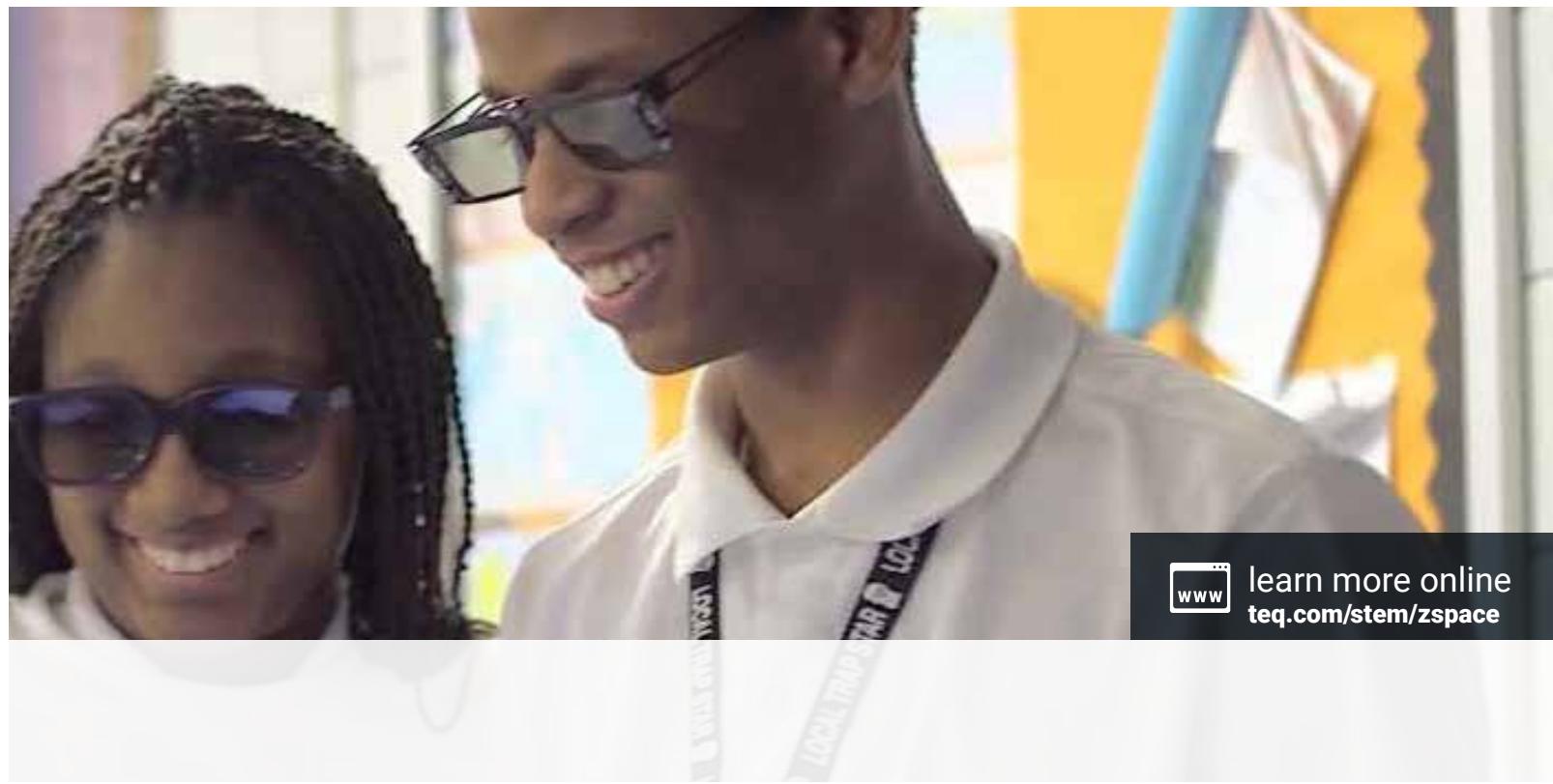


Familiar interactions: zSpace uses all of your senses to create a seamless experience. The stylus is designed with 6 degrees of freedom, allowing you to fully unlock the magic of zSpace.



Share your experience: With zView you can share your experience with not just a peer, but with an audience as well.





learn more online
teq.com/stem/zspace

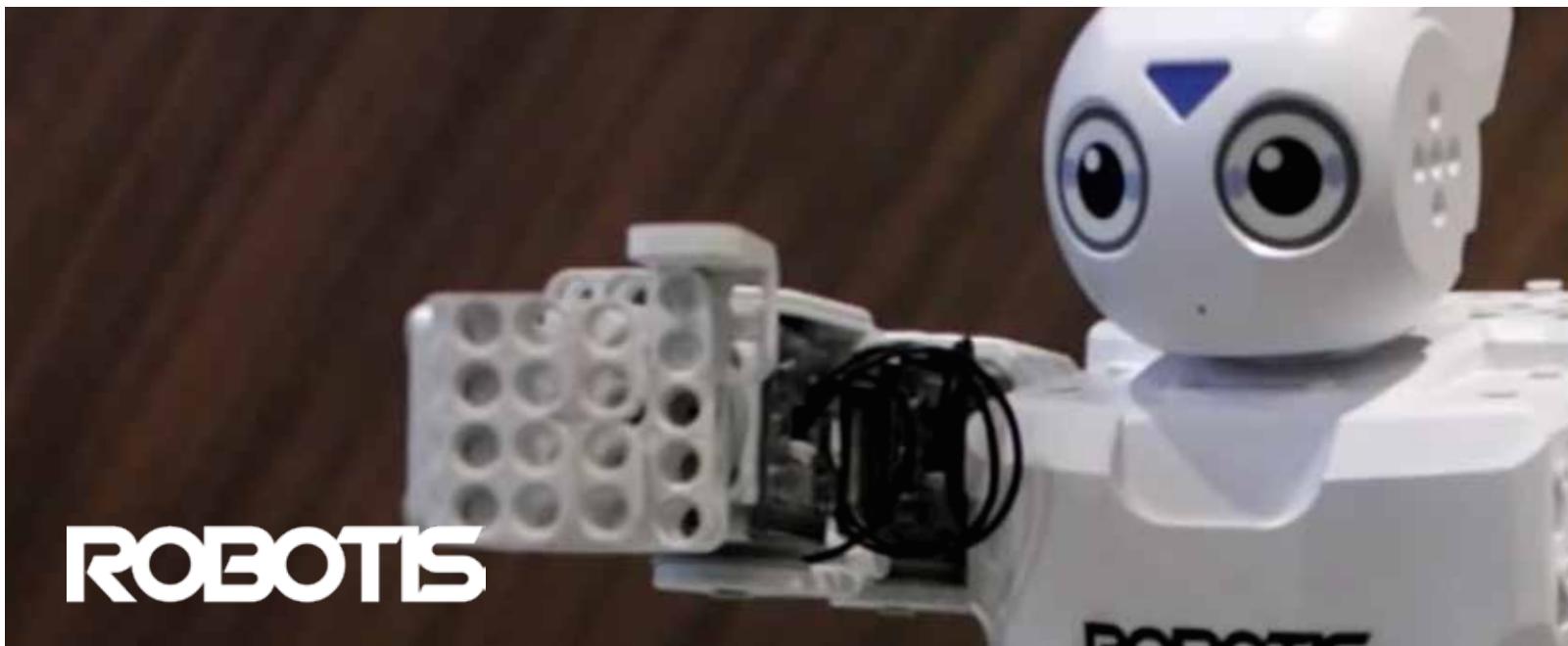


Other Key Points

Inspire Curiosity, Engage Students: zSpace encourages students to inquire, take risks, solve problems, and apply their learning while building confidence and expanding interest in STEM and STEM careers.

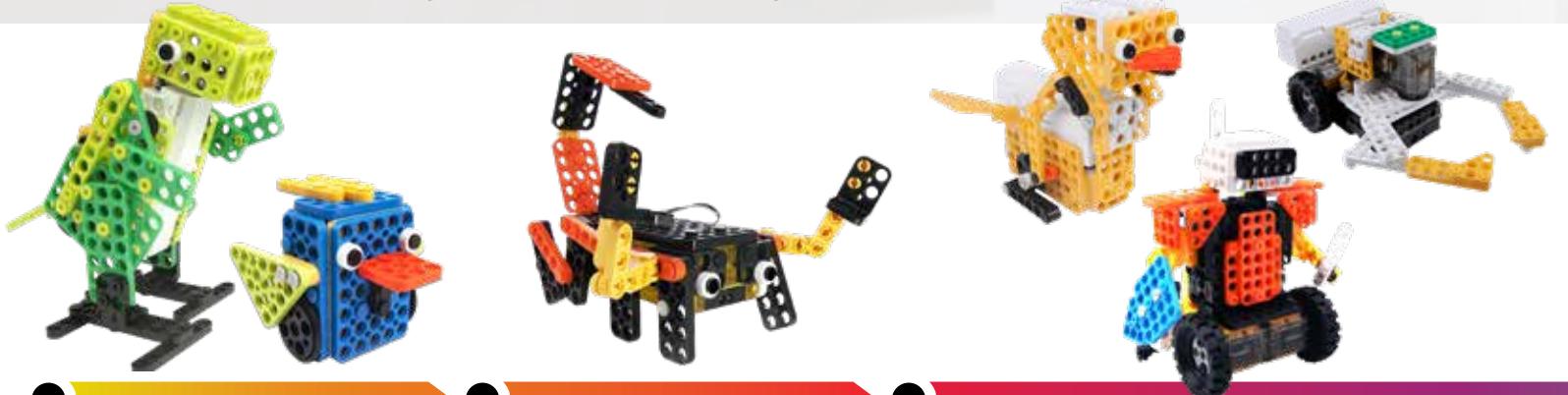
Build Student Confidence: zSpace develops fearless learners through an environment where safety is guaranteed, supplies are unlimited and experimentation is encouraged. Through life-like experiences, zSpace levels the playing field of student experience. As confidence grows and engagement is built, student interest in STEM careers expands.

Deepen Student Understanding: zSpace encourages students to inquire, take risks, and solve problems while building background knowledge to be successful. From creating original experiments to designing new objects, zSpace elevates opportunities for students to apply their learning. Student collaboration creates numerous opportunities for rich academic conversations.



ROBOTIS

Introduce and **engage students in STEM subjects** with robotics kits uniquely designed for every grade level.



Starter Kit

Robotis Play 300 Dino's and 600 Pets **(Recommended Grades K-3)**

Robotis PLAY Series are robotics kit designed to introduce students to simple engineering concepts by allowing students to build their own robots. The kits introduce students to the basic parts needed to build robots, including actuators, rivets, motors and more.

Kit 1

Robotis Play 700 **(Recommended Grades K-3)**

Robotis Play 700 kit introduces coding by having students create programs for their robots through R+ Task and R+ Scratch software.

Kit 2

Robotis DREAM Kits **(Recommended Grades 3-6)**

Robotis DREAM robotics kits introduces the fundamentals of mechanical design and the scientific principles of movement, speed, leverage, elasticity, inertia and more. Specifically, Robotis DREAM features:

Level 1- Introduces basic robotics movements and their scientific principles such as the center of gravity, force, and electric power. Level 1 also teaches the principles of biped (2-legged) and quadruped (4-legged) robotics.

Level 2- Builds on level 1 to teach the basics about the structure of robots, IR sensors, and microphone sensors. It also teaches scientific and physical principles of speed, elasticity, inertia, acceleration, and resultant force.

Level 3- Introduces various topics from science theory including sound, velocity, acceleration, and topics from technical theory including 4-wheel drive and engine systems.

Level 4- Teaches the principles of pulleys and other equipment and how to utilize robot peripherals.

Level 5- Provides more advanced teaching of robotics including on machine equipment such as LEDs and caterpillar wheels and introduces scientific principles such as energy transitions.

*Kits come with a fully-colored assembly guide, building tips, curriculum, and pre-designed lessons for the robots.



learn more online
teq.com/robotis



Kit 3

Robotis STEM Series

(Recommended Grades 6-9)

The ROBOTIS STEM kits introduce real-world engineering and physics concepts including centrifugal and centripetal force, angular velocity, the conservation of energy, and more! The STEM kits also introduce DYNAMIXEL actuators, which are used with industrial applications worldwide and introduce principles of robot programming related to them.

Kit 4

Robotis Mini

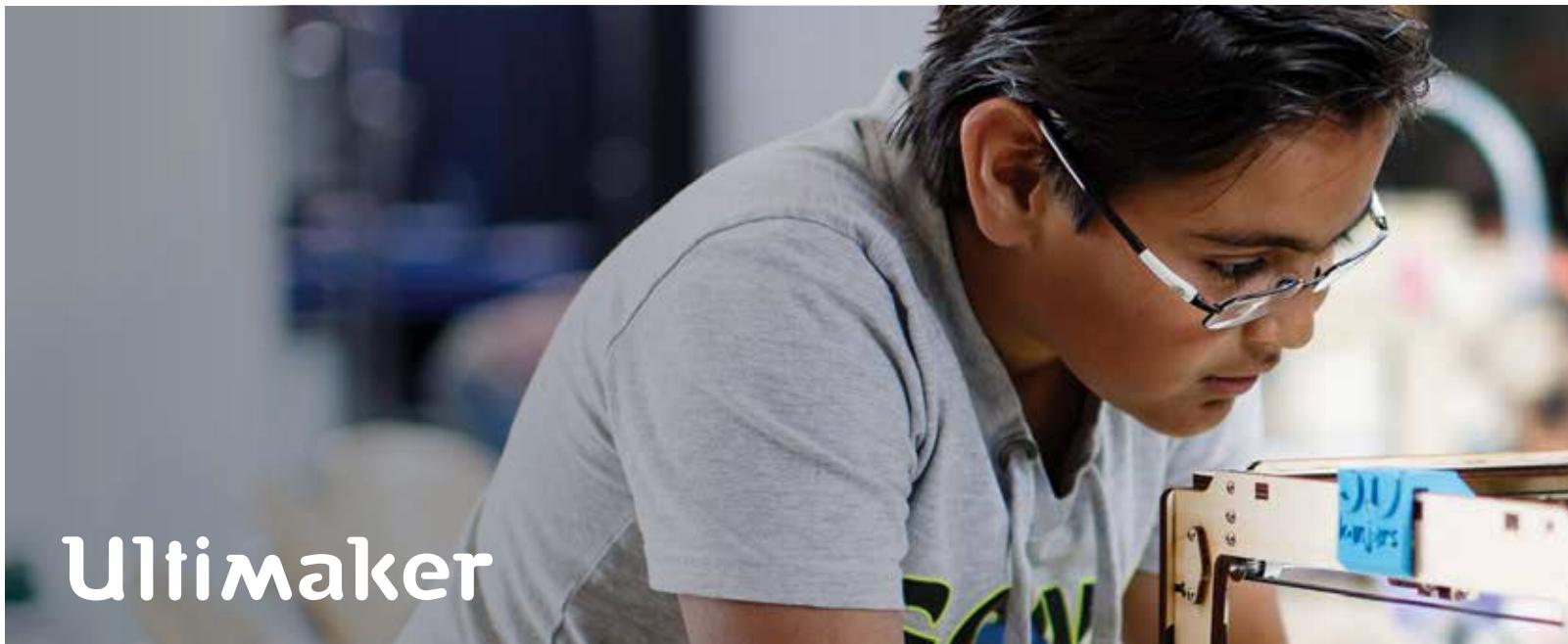
(Recommended Grades 8-10)

Robotis Mini is the most advanced robotics kit in the product line and allows your students to integrate concepts explored with the Dynamixel actuators, sensors, LEDs', and motors explored in previous kits to build their own miniaturized humanoid robot. The Robotis Mini can also be programmed using R+ Task and allows students to explore the most advanced C/C++-based programming concepts through programming its Arduino-like open-source embedded controller.



Programming with Robotis

R+ task software is a free colorful, icon-based programming tool based on C++ students can use to create programs for their robots. Programming your robots becomes more complex as you build robots that have more parts. With Robotis, you will have the opportunity to gradually explore more advanced coding concepts as you advance through each of our kits, eventually being able to explore advanced coding concepts with the Mini.



Ultimaker

Enjoy a **seamlessly integrated 3D printing experience**, where hardware, software, and materials work in perfect harmony.

Ultimaker

Engineered for efficiency, reliability, and precision, Ultimaker is the most industrial-grade desktop 3D printer on the market.

Ultimaker 3



Dual extrusion

Never worry about removal scars again. This unique feature enables the use of water-soluble support to create complex parts, intricate surfaces, dual colors, and more.



Swappable print cores

Ensure lower clogging risks. Faster print core changes mean higher uptime and easier maintenance.

Ultimaker 2



Swappable nozzle and geared feedbed

Easily switch between nozzles for greater detail and faster print. Easily swap filament and choose the correct pressure for your filament.



Ultimaker 3 Extended



Ultimaker 3



Ultimaker 2 Extended +



Ultimaker 2 +



Software and Materials

Ultimaker includes Cura, the industry-leading preparation software that turns your 3D model into a file your printer can use. Engineered for all experience levels and great for STEM initiatives.



When combined with Cura, Ultimaker's wide range of materials are formulated to achieve superior results.

Available materials include:

PLA: Ideal for education, versatile choice for smooth and detailed prints.

Nylon: Strong, abrasion-resistant, durable, flexible and low moisture sensitivity.

ABS: Tough, impact resistant, dimensionally stable and handles temperatures up to 85 °C.

CPE Family: Chemical resistant, tough, and handles temperatures up to 100 °C.

PVA Water Soluble Support: Designed to print complex geometries in dual extrusion.

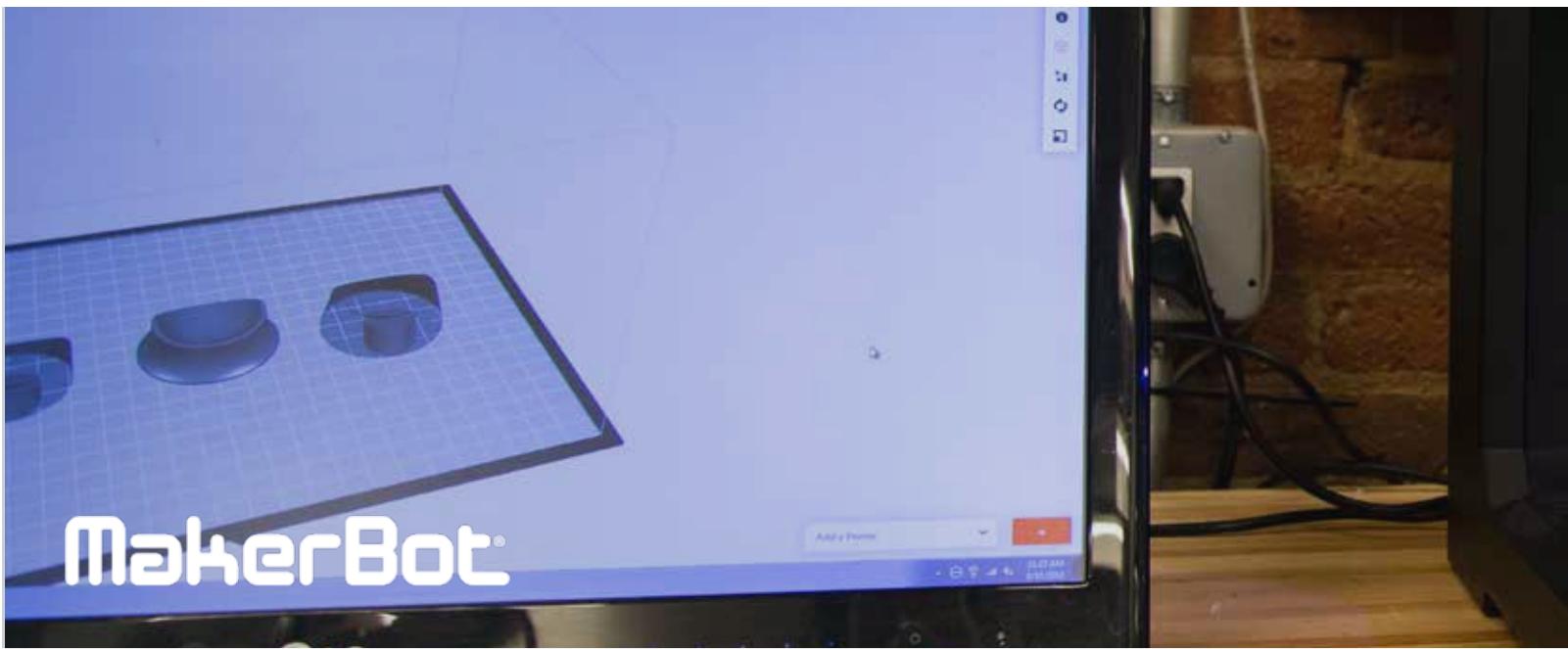
PC: Strong, tough and heat resistant up to 110 °C.

TPU 95A: Semi-flexible, durable, and chemical resistant.

PP: Excellent temperature, chemical, and fatigue resistance with low friction.

Breakaway Removable Supports: Quickly removed by hand providing a quality surface finish.





MakerBot

Empowering today's students to become the **innovators of tomorrow.**

Replicator +

The MakerBot Replicator+ is engineered and tested for reliable, faster printing.

Features:

- Full Color LCD Display
- Wi-Fi, Ethernet, and USB connectivity
- Flex Build Plate with Grip Surface
- Automatic (Factory) Leveling
- 25% Larger Build Volume
- Access to MakerBot Support Team in NYC

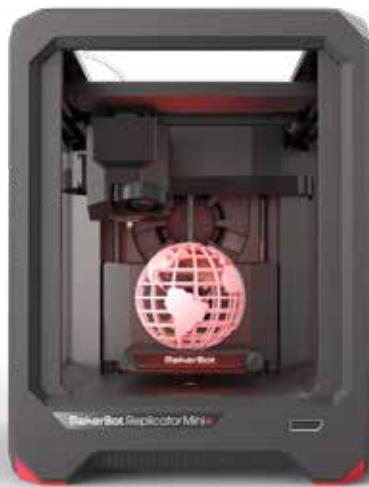
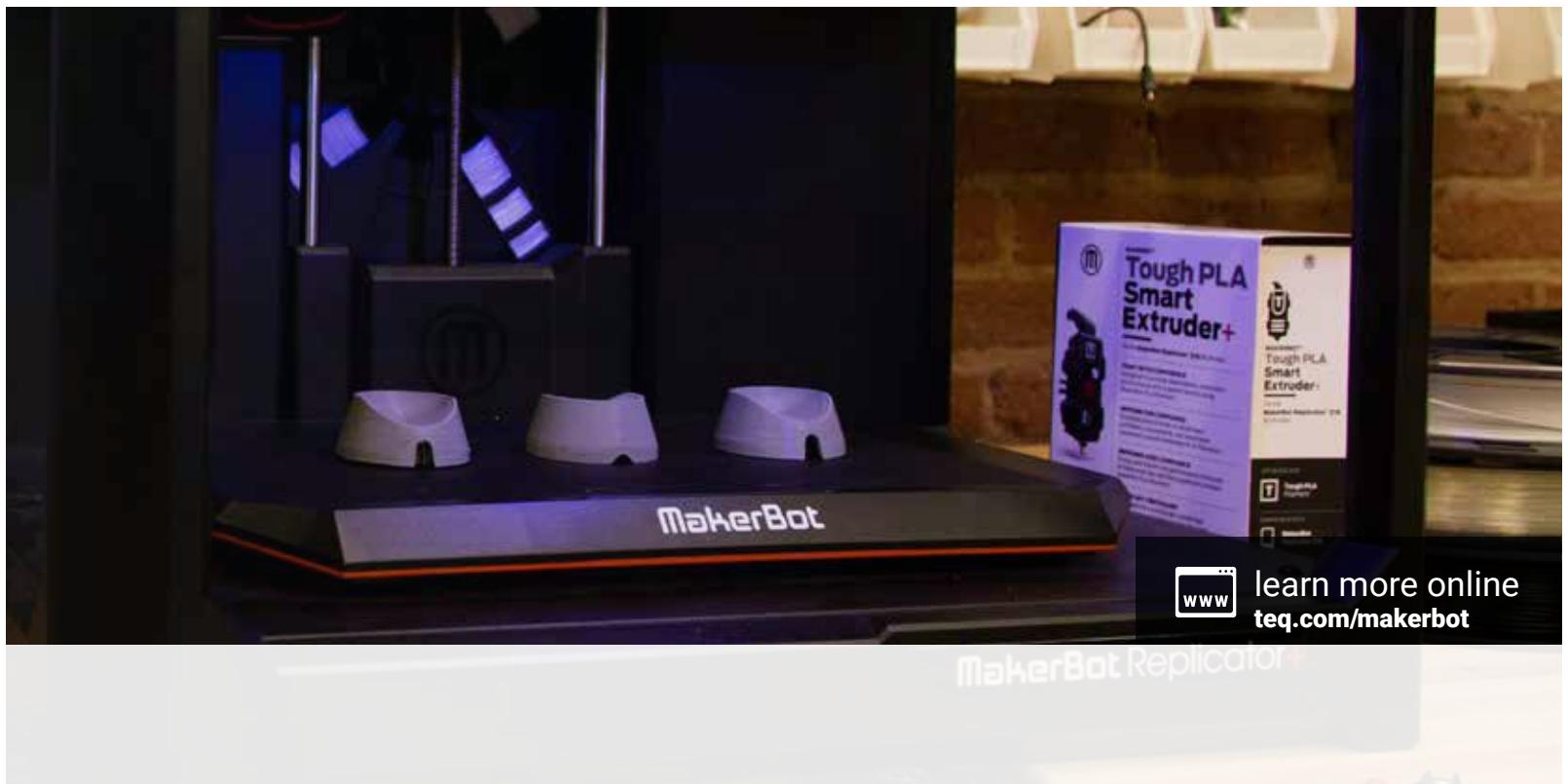


Standardized Features: Features such as the Smart Extruder, on-board camera, wide connectivity, an LCD display, and MakerBot PLA Filament ensure an easy and accessible 3D printing experience.

Swappable SMART Extruder +: Improved components and an enhanced sensor system ensure the printing process is streamlined and reliable and can be simply swapped out for another extruder to minimize downtime.

Flex Build Plate with Grip Surface: Prints adhere better to new Grip Surface resulting in reduced warping and curling. No blue tape required. Prints are also easier to remove with the new bendable Flex Build Plate and is factory-leveled so your Replicator+ is ready to go right out of the box.

Cloud-Enabled: The MakerBot Replicator+ is Cloud-enabled, allowing you to control and manage one or more printers over the cloud using MakerBot Print or MakerBot Mobile software.



Replicator Mini+

The MakerBot Replicator Mini+ combines portability with ease-of-use for a simple, accessible, and reliable 3D Printing experience.

Features:

- Portable and easy to move between classrooms or offices.
- Build plate with grip surface for reduced warping and curling and factory leveled to be ready to go right out of the box.
- 58% quieter printing for a more focused environment.
- Cloud-enabled to control and manage one or more printers over the cloud.



Replicator Z18

With a massive build volume, you can print prototypes and parts at a vastly lower cost than industrial 3D printers with the MakerBot Replicator Z18.

Features:

- Best price-to-performance ratio in the industrial 3D printer category.
- Create professional-quality, high-resolution prototypes and complex models.
- Refine designs at a faster pace with Real-Time Prototyping™ technology.
- Wi-Fi, Ethernet, and USB connectivity create a seamless production workflow.



Labdisc

Revolutionize the way students learn with this **portable** and **cost-effective** science lab.

Labdisc

Labdisc is an all-in-one, data logging device that places an advanced science lab into the hands of young scientists. The only K-12 science solution with more than 10 wireless sensors built into a single compact device, available for general science, physics, biochemistry, and environmental science.

Internal sensors include:



Labdisc GenSci

Air Pressure, Current, GPS, Light, Microphone, Motion, pH, Relative Humidity, Temperature, Universal Input, Voltage.



Labdisc Physio

Accelerometer, Air Pressure, Ambient Temperature, Current, Ext. Temperature, Light, Low Voltage, Microphone, Motion, Universal Input, Voltage.



Labdisc BioChem

IR Pressure, Ambient Temperature, Barometric Pressure, Colorimeter, Conductivity, Dissolved Oxygen (electrode sold separately), GPS, Heart Rate, Light, pH, Relative Humidity, Thermocouple, Turbidity, Universal Input.



Labdisc Enviro

Barometer, Sound Level, Colorimeter, Dissolved Oxygen (electrode sold separately), GPS, IR Temperature, pH, Relative Humidity, Temperature, Turbidity, Universal Input.



learn more online
teq.com/labdisc



Zero setup time

The Labdisc's internal microprocessor automatically calibrates the built-in sensors, freeing educators to focus on science concepts rather than equipment.



Enable portable data collection

through a Bluetooth connection and GlobiLab, Labdisc's included software.



Seamlessly Integrates with Classroom Devices

Students can analyze their findings with a variety of data displays and graph manipulations on interactive displays, laptops, Chromebooks, or iPads.



Labdisc Mobile Cart

- Storage and charging docks for 16 Labdisc units and 16 tablets
- Special storage compartments for electrodes and accessories
- Lockable doors and steel design for safe storage



Revolutionize the way your students learn with the **most engaging robot** on the planet.

JumpStart NAO

JumpStart NAO combines NAO, the most widely-used robot in academics world-wide, with Teq's Professional Development. Educators develop the skills to create NAO-centered activities that foster collaborative learning, critical thinking, and research and planning skills, while students discover a broad range of STEM disciplines.



NAO is an autonomous, programmable humanoid robot that runs on Choregraphe software.



With NAO, teachers practice project-oriented pedagogy, making classes lively and fun for students of all ages.



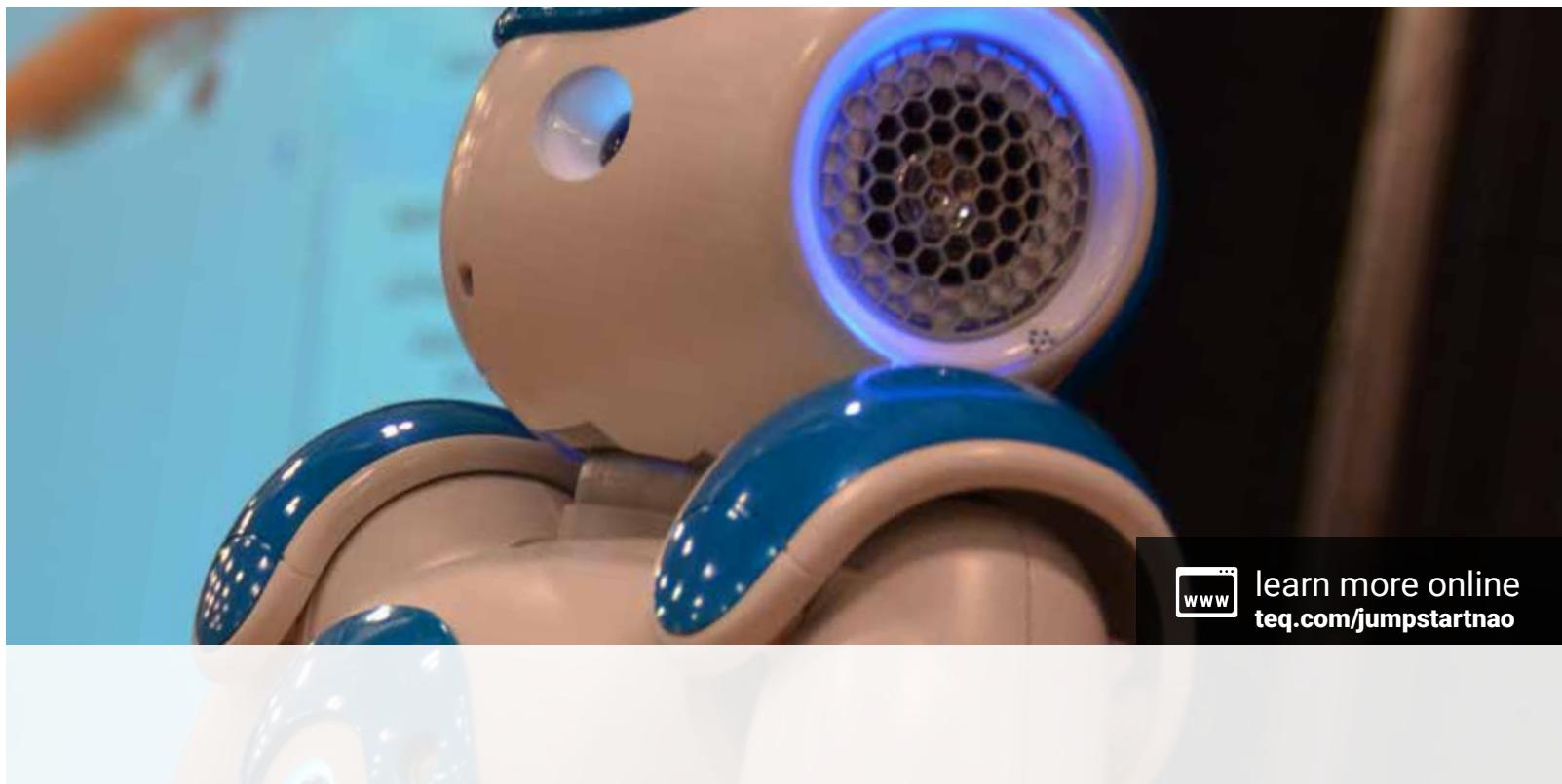
Teq's Professional Development gives educators the skills to operate NAO, no matter their prior experience with STEM and robotics, through a number of on-site training sessions with Teq's PD Specialists.

NAO·U

This downloadable, digital textbook offers over 30-hours of curriculum for your NAO robot. Perfect for an after school or summer program, these activities are geared toward a wide-range of grade levels and subjects. NAO·U helps educators deliver STEM lessons, no matter their prior knowledge of robotics.



30 Hours of curriculum!



learn more online
teq.com/jumpstartnao



JumpStart NAO 1

Includes 1:

- NAO humanoid robot
- 2-year standard warranty
- Introduction to Robotics with NAO textbook and PDF
- Unlimited Choregraphe software license

5 full consecutive PD days



JumpStart NAO 2

Includes 2:

- NAO humanoid robot
- 2-year standard warranty
- Introduction to Robotics with NAO textbook and PDF
- Unlimited Choregraphe software license

5 full consecutive PD days



JumpStart NAO 3

Includes 3:

- NAO humanoid robot
- 2-year standard warranty
- Introduction to Robotics with NAO textbook and PDF
- Unlimited Choregraphe software license

5 full consecutive PD days

Engages students through project-based learning, and promotes individual and group work.

Supports a STEM curriculum and stimulates curiosity into STEM subjects with NAO's hands-on exercises.

Learn to Code - Encourages student innovation and creation with NAO's powerful and fully-programmable platform (SDK provided: C++, Python, Java, .Net)

Promotes cross-curricular teaching and learning - Through NAO activities, students can explore everything from science to social studies.



Encourage students of any grade level to experience STEM activities like **3D printing**, **coding**, and **website design** with STEM Fuse.

STEM Fuse

STEM Fuse is a digital STEM curriculum with over 20 available courses. Each STEM Fuse course comes with a teacher guide, step-by-step presentation, and lesson plan, for an easy deployment of STEM into core K-12 curriculum. STEM Fuse digital content fits any device, LMS, interactive board or panel, and can be downloaded as printable PDF files.

STEM:IT Elementary combines programming lessons, unplugged STEM activities, and 3D printing projects into project-based STEM lessons for core elementary subjects (ELA, Math, Science, and Social Studies). This package includes three lessons per core subject area for a total of 12 lessons for grades K-5.

STEM:IT Middle and High School includes cross-curricular STEM challenges in which students are faced with real-world problems and use the engineering design cycle to lead them through the process of solving them.

READ:IT is a fully digital and interactive RTI (response to intervention) based reading program. The systematic, multi-sensory approach incorporates all five components of reading (phonemic awareness, phonics, fluency, comprehension and vocabulary) to ensure the combination of teacher-directed instruction and intervention with independent student activities. (Available for grades K-5)

GAME:IT exposes your students to a wide range of concepts and technical skills that will greatly help them succeed in the future.

GAME:IT provides instruction in six critical areas:

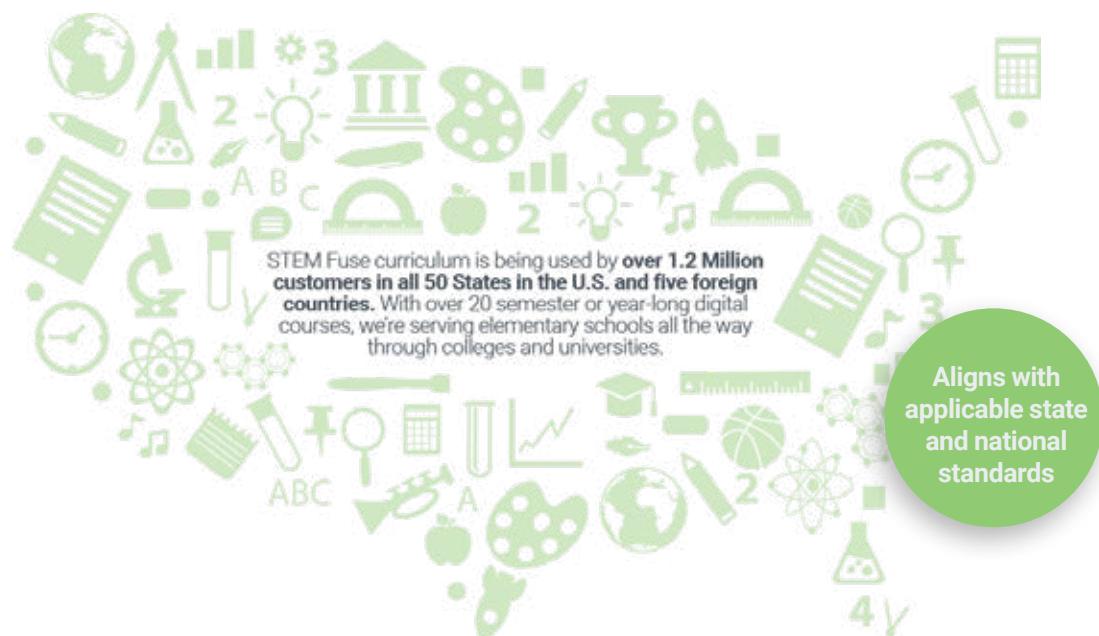
1. Skills related to software development, computer programming, and graphic design
 2. Creative, innovative, and critical thinking
 3. Communication and collaboration
 4. Using appropriate and accessible digital tools for research and learning
 5. Using engineering, physics, and mathematical concepts critical to game development
 6. Post secondary and career options, and resources related to STEM
- (Courses available for elementary, middle, and high school)



learn more online
teq.com/stemfuse

MOBILE APP:IT is a semester-long, project-based course that introduces students to Java programming and the development of mobile applications for Android devices.

WEB DESIGN is a semester-long, project-based course introduces students to web design and content management systems (CMS).





Copernicus 3D Printer Cart

Allow 3D printing to happen **whenever, wherever.**

3D Printer Cart

When schools increase their 3D printing usage, the need to properly store printer tools and materials also increases. With the Copernicus 3D Printer Cart, printing equipment can be stored in one convenient location and easily moved from space to space. Ideal for libraries and classrooms with limited room.





learn more online
teq.com/sight-and-sound/accessories

Key Features



One-stop-shop

Store all your 3D printing needs in one user-friendly space.



Flexible

Easily manage equipment of all shapes and sizes with customizable storage combinations.



Compact

Maximize the use of your 3D printer while not compromising space with the cart's compact design.



STEM MAKER STATION

Copernicus STEM Maker Station

STEM Maker Station

Make building and hands-on learning experiences readily available to your students with the STEM Maker Station—a mobile cart that stores essential maker materials in one secure place.





learn more online
teq.com/stem/stem-maker-station

Key Features



Durable and Mobile

Its weight and mobility makes it ideally suited to K-12 level students. Perfect for mechanical and art-based classroom activities.



Extensive Storage

This station is designed to manage the storage of tools, materials, and tech devices. The large open storage rack, open tubs, and large bottom shelf are suitable for carrying a wide range of materials and negate the need for using multiple storage solutions.

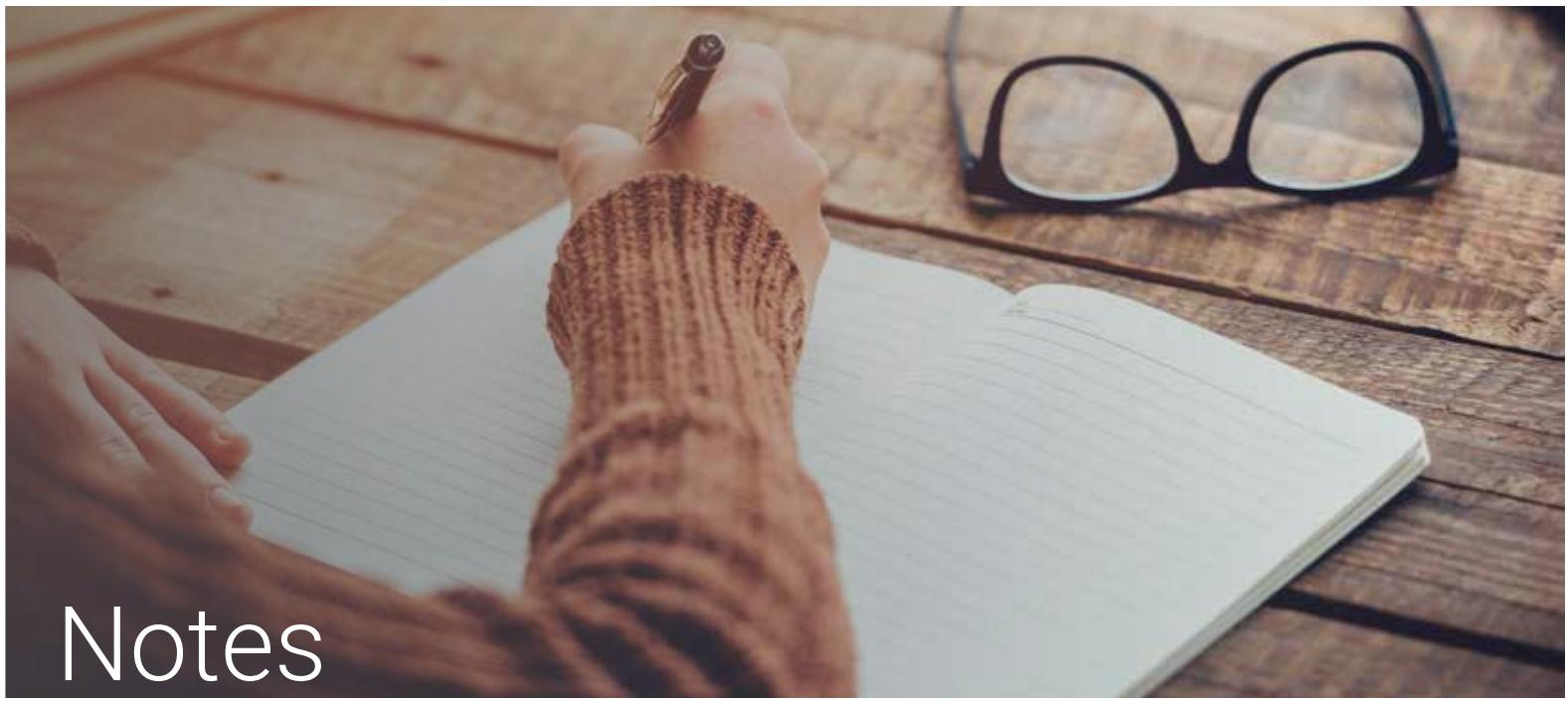




Notes



Notes



Notes

Get started with your new classroom technology.

G Suite, Chromebooks, SMART Boards... no matter the tech, you can save class time, build confidence, and start using new products and software right away with complimentary access to hours of PD content, which may be used towards your state teaching license.*

Login in at:

<http://onlinepd.teq.com/gettingstarted>
to see the list of available PD courses.



Professional Development.

Access hundreds of state-approved professional development videos and our calendar of weekly live PD broadcasts. Teq Online PD contains hours of on-demand PD for Google, SMART, Microsoft, Apple, PBL, STEM, and more.

<http://onlinepd.teq.com>

Visit www.teq.com/State-Approved
for a complete list of State Approved
Professional Development

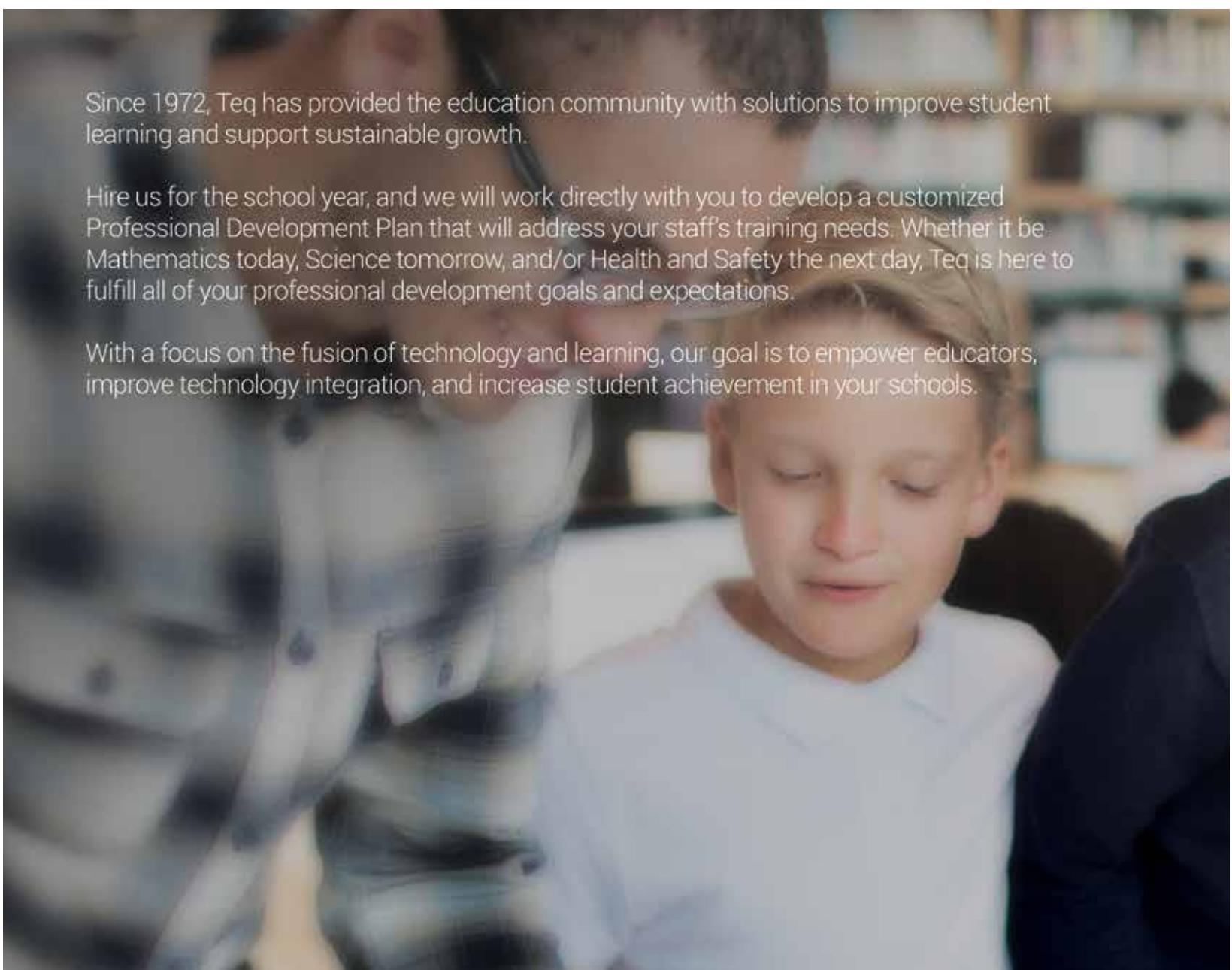
Instructional Support.

Get instant instructional support via live video, email or text chat. Schedule a call with an instructional technology expert when it is convenient for you. nOw gives you instructional technology support right when you need it.

<http://nOw.teq.com>



*Teq is an approved New York State CTLE PD provider, and an approved PD provider for teacher certification requirements in Delaware, West Virginia, Nevada, Wyoming, Massachusetts and Montana. Teq certification courses are approved for teacher certification requirements in Nevada. Check with your district for more information on how Teq Online PD can be used for your teaching certification.



Since 1972, Teq has provided the education community with solutions to improve student learning and support sustainable growth.

Hire us for the school year, and we will work directly with you to develop a customized Professional Development Plan that will address your staff's training needs. Whether it be Mathematics today, Science tomorrow, and/or Health and Safety the next day, Teq is here to fulfill all of your professional development goals and expectations.

With a focus on the fusion of technology and learning, our goal is to empower educators, improve technology integration, and increase student achievement in your schools.

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