McZeal Robotics





# PREPARING FOR AI

2023



### K-12 CATALOG

### HY DO WE EXIST?

Because we genuinely care about giving students all over the world the tools and resources they need to make an impact in the world.

# ON DOES ROBOTLAB WORK?

By partnering with educators and the most prestigious institutions, we lead the EdTech revolution globally. With hundreds of handpicked educational technology programs, we are the one-stop-shop for everything EdTech. Globally, we have impacted the lives of thousands of schools, tens of thousands of educators, and millions of students.

### WHAT DOES ROBOTLAB OFFER?

Our products and services all center around three main pillars. In terms of products, we offer the latest and greatest education technology on the market at the best price guaranteed. In terms of the integration of EdTech products into the classroom. our Engage EDU is an online platform that covers lesson plans for every subject, every age group, and every robot. It aligns with Common Core, NGSS, TEKS onboarding, training, and updated refreshment courses. Our customers are always taken care of.

McZeal Robotics



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### THE AI LAB

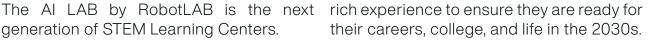
generation of STEM Learning Centers.

#### It converts generic STEM concepts to real-life experiences, which puts artificial intelligence at the center of learning.

Developed by the students, the AI is used to control smart cars and drones, automate production lines, design human-robot interactions, and even take them to space exploration, where robots must make decisions autonomously, without a hot-link to a human operator many millions of miles away.

The AI LAB is designed to enable students to rotate between the AI Stations, exposing them to multiple disciplines and various scenarios where artificial intelligence takes control of our lives.

This gives the students an unparalleled and



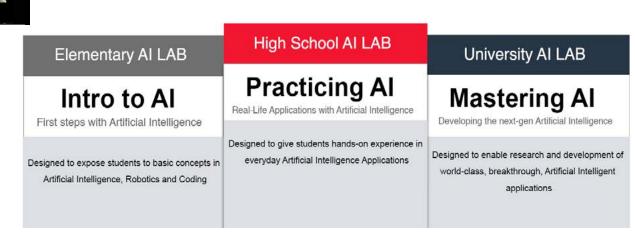
McZeal Robotics

It includes all instructional materials, apparatus, software, and equipment necessary to accommodate a class size of your choice. It is a complete system integrated materials, of furnishings. and curricula that provides a platform for investigating AI / STEM principles and practices through an integrated real-life context-based series of technological learning experiences using robots.









Every AI LAB is a complete turnkey system of integrated materials, software, an online learning system, networking and servers to back up student projects. In addition, the AI LAB includes cutting-edge equipment and all furnishings necessary to accommodate a group size of up to 30 students.

### What's included in the AI LAB?

Products:	Software:	Technology:	Furniture:	Optional:
-Station products- quantity is adjusted based on station and budget - Activity mats as required	-3 years of access to Engage K12 platform - Software associated with the robots - 1 year warranty- (includes online support)	-All-in-one computers -Keyboards -Mouse -Large monitor with wall mount -Wireless router -Printer -Power strips -USB chargers	-Student tables -Student chairs -Teacher table -Teacher chair -Storage cabinet	-Custom wall art -Product stickers for the storage cabinet -Pepper academic ambassador -VR advanced pack with mobile charging cart





# CUSTOMIZE YOUR AI LAB

Choose the right configuration for you!

We understand that each project is unique and will do our best to tailor your AI LAB's needs. Our specialists can accommodate your situation based on available space, the number of students, and the budget.

We have done many different types of labs across the globe, both for learning and research and development.



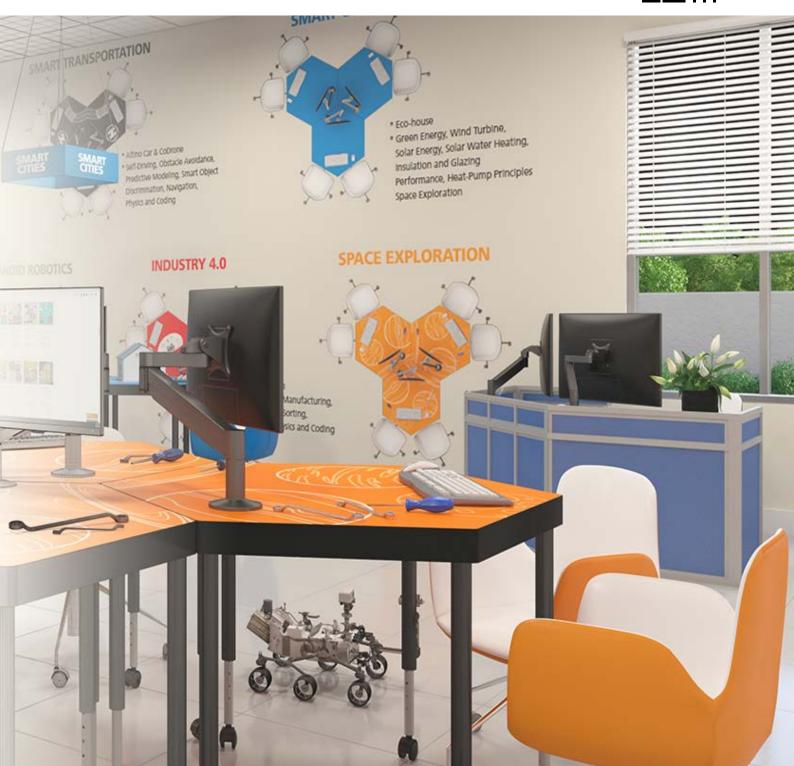
No matter where you are, we will come to you and provide a state-of-the-art modular learning environment. Just tell us about your focus area, and we will customize a solution based on more than a decade of expertise in the integration of robotic technology in education.

Over the next few pages you will see examples of some of our most popular stations, however, if there is an area of study that you would like included in your lab, do not hesitate to ask about it and we will customize a solution for you.

Thank you for your interest in RobotLAB and we cannot wait to partner with you on your next project!

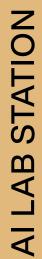


Please contact our AI LAB specialists at: Sales@RobotLAB.com or +1-415-702-3033



### INTRO TO ENGINEERING STATION

Intro to Engineering station is an excellent resource to teach younger students robotics concepts. These kits promote problem solving skills and creativity.



Examples of Subjects Covered:

Basic engineering concepts, building robots, gears, linear and angular motion sensors, motors, rigid and flexible designs, control and enforcement mechanisms in software and hardware.

#### <u>Utilizes NGSS Standards</u> <u>Examples:</u>

K-2- Engineering and Design1- Structure, Function and Information Processing2- Structure and Properties of Matter

Common Core Standards:

R.I2.1-Ask and answer questions such as "who, what, where, when, why, and how"



to understand key details in the text.

W.2.7- Participate in shared research and writing projects W.2.8- recall information from experiences or gather information from provided resources to answer a question MP.4- Model with mathematics MP.5- Use appropriate tools

### PRODUCTS FOR THE STATION



Bioloid Dream STEM-LAB

#### WHAT'S INCLUDED:

- Robot kits
- Assembly and building instructions
- Tablets
- AIO computers
- Software
- Associated lessons



### INTRO TO AR/ VR STATION

Intro to AR/VR station introduces augmented reality (AR) concepts to students while also teaching teamwork and practicing problem-solving skills. Learn to code with a Blockly/Scratch type interface with Javascript preview. Students can choose from four different themed mats or have the option to create their own as they become more familiar with the platform.



AI LAB STATION

Examples of Subjects Covered:

Story-telling, making connections between reality and digital objects, block-based programming, problem solving, creativity, slope and sequence, applied robotics in math and geometry, motion, collaboration, game design and the basics of human robot interaction.

### WHAT'S INCLUDED:

- Mini rovers
- Smartphones
- Tripods
- Tablets
- AIO computers
- Theme-based mats
- Docking stations



PRODUCTS FOR THE STATION



KAIS CLAN

- Software
- Lessons
- 1-year warranty
- RobotLAB support

### **INTRO TO CODING STATION**

Intro to Coding station takes programmable robots, web-based lessons and a drag-and-drop interface to start kids programming quickly. Dash & Dot are responsive robots packed full of capabilities that allow them

to interact with students, their environment, and each other thanks to their multiple built-in motors, sensors, LEDs, and audio capabilities.



Examples of Subjects Covered:

Story-telling, making connections between reality and digital objects, block-based programming, problem-solving, creativity, slope and sequence, applied robotics in math and geometry, motion, collaboration, game design, and the basics of human-robot interaction.

### Utilizes NGSS Standards Examples:

3-5 Engineering design

4. Middle School-Structure, function, and Information processing



PRODUCTS FOR THE STATION



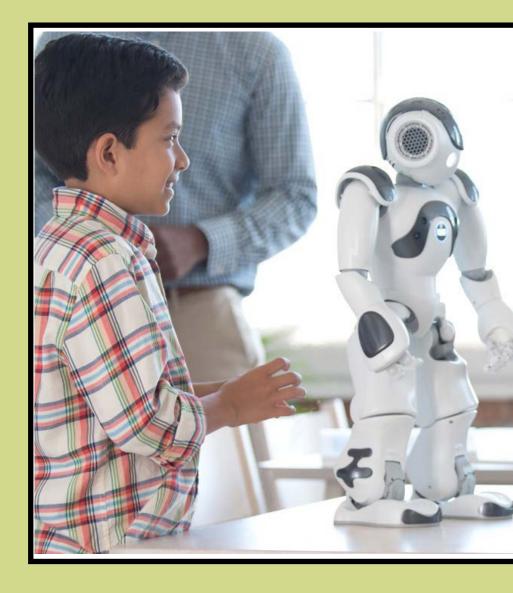
DASH & DOT

#### WHAT'S INCLUDED:

- Mobile and stationary robots
- Accessories
- AIO computers
- Tablets
- Software
- Lessons

### HUMANOID ROBOTICS STATION

NAO is the perfect robot to spark curiosity in students and is a versatile product for teaching story-telling, math concepts, and countless creative projects. A virtual robot allows students to test their projects before presenting to their peers. Programming languages include a drag-and-drop interface, Java, Python and C++.



Examples of Subjects Covered:

Introduction to humanoid robots, game design, human robot interface, story-telling, visual perception (face detection, face recognition, object detection and recognition), tactile sensing, synchronous motion, math and trigonometric functions, Logic, and problem-solving.

### Utilizes NGSS Standards Examples:

3-5 Engineering design

4. Middle School-Structure, function, and information processing



### WHAT'S INCLUDED:

- Humanoid robots
- Docking stations
- AIO computers
- Software
- Lessons
- 1-year warranty
- RobotLAB support

PRODUCTS FOR THE STATION



NAO ROBOT



PEPPER ROBOT



### SMART TRANSPORTATION STATION

Smart Transportation station gives students the opportunity to foster concepts of the present and future and navigate through obstacles while utilizing basic programming languages. Students use sensors, controllers, and programming logic with Drones. Zumi is an excellent way to practice programming with Al using these fun, self-driving cars.



AI LAB STATION

Examples of Subjects Covered:

Navigation, collision avoidance, self-driving, self-parking, calculating torque, solving mazes, thrust gravity, flight basics and flight control

### Common Core Aligned Examples:

#### CCSS.MATH.CONTENT.7.G.B.4/CCSS.MATH.CONTENT.7.G.B.5 CCSS.MATH.CONTENT.7.G.B.6 Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.



NGSS Standards Examples: 3-5-ETS1-1 Engineering Design MS-ETS1-1 Engineering Design 4-PS3-1 Energy 4-PS3-4 Energy HS-PS2-3 Motion and Stability: Forces and Interactions.

TEKS Standards for Smart Transportation Station (Codrone/Zumi)

112.18 Science, Grade 6 112.B Science- Middle School §127.749. Robotics I STEM-Grades 9-10 §127.750. Robotics II STEM-Grades 9-10

### PRODUCTS FOR THE STATION



CODRONE

#### WHAT'S INCLUDED:

- Drones
- Rovers
- 1 Driving school mat
- AIO computers
- Software
- Lessons
- Onsite installation
- Training
- 1-year warranty
- RobotLAB support



ZUMI

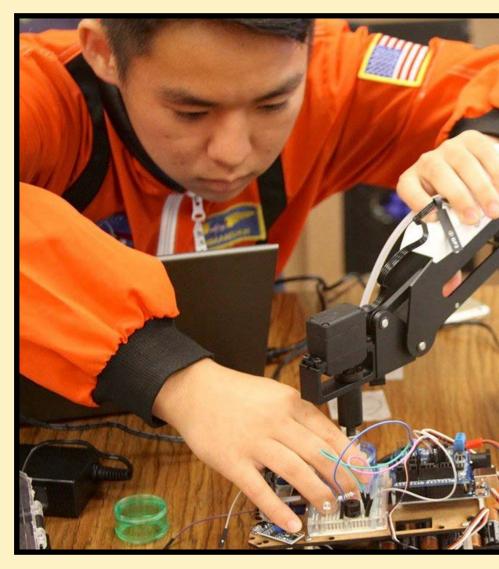
### **INDUSTRY 4.0 STATION**

Industry 4.0 station is the best way to teach smart warehouse concepts from an early age. Students first become comfortable with basic lessons such as drawing, and picking up objects, then into more advanced lessons in sorting using a vision kit, conveyor belts, and sliding rails.

Examples of Subjects Covered:

AI LAB STATION

Warehouse automation, sorting and stacking, visual sensing, assembly lines, process automation and optimization, data analysis and collaborative robotics.



### PRODUCTS FOR THE STATION



NIRYO



DOBOT



KUKA

Common Core Aligned Examples:

CCSS.MATH.CONTENT.4.OA.C.5-Generate and analyze patterns.

CCSS.MATH.CONTENT.4.MD.A.2-Solve problems involving measurement and conversion of measurements.



CCSS.MATH.CONTENT.5.OA.B.3 Analyze patterns and relationships.

CCSS.MATH.CONTENT.6.SP.A.1 Develop understanding of statistical variability.

CCSS.MATH.CONTENT.7.G.A.1 Draw construct, and describe geometrical figures and describe the relationships between them.

NGSS Standards Aligned Examples: 3-PS2-4 Motion and Stability: Forces and Interactions 4-PS4-3 Waves and Their Applications in Technologies for Information Transfer 3-5-ETS1-1 Engineering Design 3-5-ETS1-2 Engineering Design MS-PS2-1 Motion and Stability: Forces and Interactions MS-ESS3-3 Earth and Human Activity

#### WHAT'S INCLUDED:

- Robotic arms
- Vision Kit
- Conveyor belts
- Sliding rail
- Arduino Al kits
- AIO computers

- Software
- Lessons
- Onsite installation
- Training
- 1-year warranty
- RobotLAB support

### IoT STATION

Analyze data from tests to determine similarities and differences among several design solutions. Then identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.

MS-PS4-3 Waves and their Applications in Technologies for Information Transfer.



AI LAB STATION

Examples of Subjects Covered:

Introduction to the Internet of Things, circuits, electronic components, modeling, variables, network security, serial communication, APIs, JSON, web servers, integrating sensors, data collection and analysis.

#### Common Core Standards Utilized:

CCSS.MATH.CONTENT.4.MD.B.4 Represent and interpret data.

NGSS Standards Examples: MS-ETS1-3 Engineering Design

Analyze data from tests to determine similarities and differences among several design



solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.

MS-PS4-3 Waves and their Applications in Technologies for Information Transfer.

#### PRODUCTS FOR THE STATION



ARDUINO

#### WHAT'S INCLUDED:

- Arduino loT kits
- Mobile storage cart
- AIO computers
- Software
- Lessons
- Onsite installation
- Training
- 1-year warranty
- RobotLAB support



### **PROJECTED REALITY STATION**

The Projected Reality Station (PRS) by RobotLAB is an innovative and highly engaging solution that stimulates the senses by getting students actively involved and keeping them entertained. Dynamic content is projected onto sand, creating fully interactive and dynamic 3D worlds.

It is an exciting, new learning tool that opens up a world of possibilities, by bridging the gap between abstract science concepts and real-life hands-on experienes using sand and projected reality technology.

Have your students manipulate the sand to let lava flow, oceans swirl, grass grow, and bubbles blow! It also helps younger students learn about colors and numbers and how to draw and explore their surroundings.

AI LAB STATION



Examples of Subjects Covered:

A revolutionary and interactive educational solution that brings science to life with fully interactive and dynamic hands-on activities using virtual 3D worlds

#### NGSS Standards Examples:

K-ESS2-2 Earth's Systems K-ESS3-2 Earth and Human Activity K-ESS3-3 Earth and Human Activity

1-LS1-1 From Molecules to Organisms: Structures and Processes 2-ESS1-1 Earth's Place in the Universe 2-PS1-4 Matter and Its Interactions



3-LS2-1 Ecosystems: Interactions, Energy, and Dynamics
3-LS4-3 Biological Evolution: Unity and Diversity
MS-LS1-4 From Molecules to
Organisms: Structures and
Processes
MS-ESS2-2 Earth's Systems

> PRODUCTS FOR THE STATION



PROJECTED REALITY STATION

### WHAT'S INCLUDED:

- 1 Projected reality station
- 1 Teacher tablet
- Software preloadedw
- Curriculum (aligned with NGSS)
- Onsite installation and training
- 1-year warranty and RobotLAB support



### The e-Sports lab

### Your Opportunity

Use e-sports to develop STEM-based skills with fun and engaging games to bring your program to the next level.

Increase your students' recruitment and participation with fun and competitive activities.

Spark your students' interest and generate passion in a \$1.2 billion industry that is still growing exponentially.

Academic e-sports can open up college pathways for many students, with tournaments rewarding significant scholarships and universities recruiting students to participate on their esports teams.

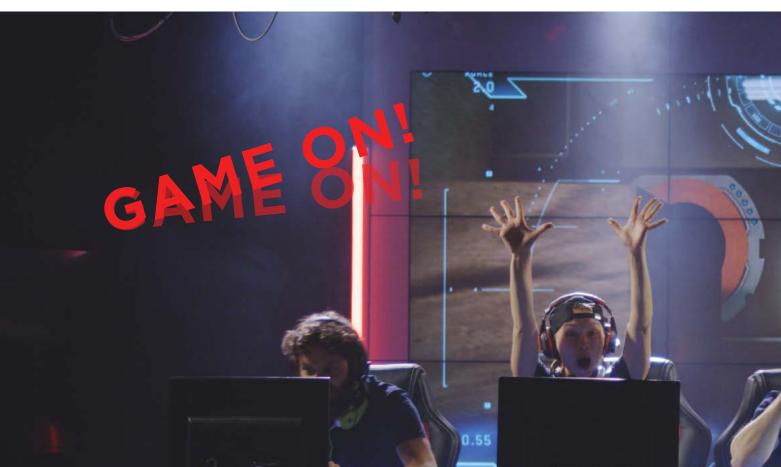
The e-sports lab by RobotLAB is a turnkey solution for schools and districts looking to start or grow an e-sports program. It takes video gaming to another level with state-of-the-art gaming systems and a cohesive and innovative layout that can be customized to your space.

### Benefits

- STEAM/ Technology skill building
- leadership
- Critical thinking
- Problem solving, strategic planning & group preparation
- Teamwork
- Communication



Pine Crest Elementary School of Innovation, FL



#### More than Players

Esports will help develop strategic thinking, foster teamwork,build confidence through positive reinforcement and encouragement from teammates to elevate their cognitive skills to a higher level.

e-sports can be align with the current curriculum, including computer science, creative design, art, science, entrepreneurship, language arts etc.

Our program will help your students gain 21st Century skills.

#### An All-in-One Solution

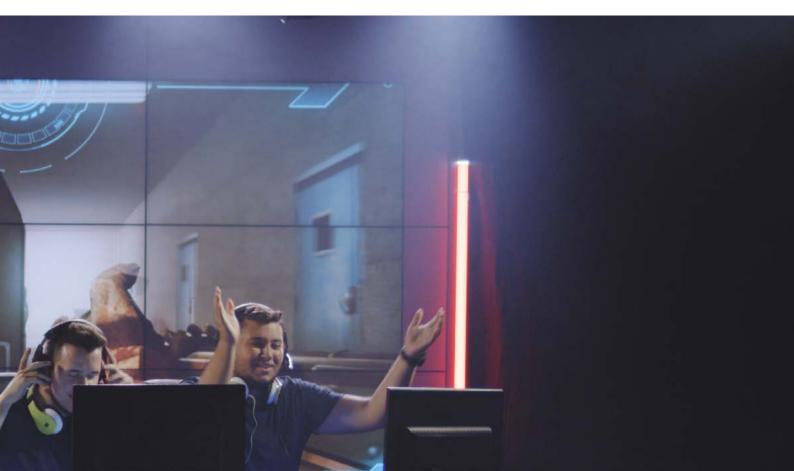
Every e-sports lab is a complete turnkey system of integrated materials, gaming systems, software, networking and servers, cutting-edge equipment, wall art and all ergonomic furnishings necessary to accommodate a group size of up to 40 students.

Our gaming systems are compatible with the most popular multi-player games used in e-sports, such as: Rocket League, League of Legends, Fortnite, Minecraft (Education Edition), etc.

The e-sports lab by RobotLAB is a fully-integrated solution with the highest level of service and quality including complete installation, professional development and a direct access to support and online resources to ensure your program is successful.

We understand that each project is unique and we'll do our best to tailor your esports lab's needs. Our specialists can accommodate your configuration based on available space, number of students, age group and budget.

Contact our esports specialist at: Sales@RobotLAB.com or +1-415-702-30330



### AVAILABLE ADD-ONS FOR THE AI LAB STATIONS



### VIRTUAL FIELD TRIPS

Examples of Subjects Covered:

A revolutionary and interactive educational solution that brings science to life with fully interactive and dynamic hands-on activities using virtual 3D worlds

### WHAT'S INCLUDED:

- Standalone VR headsets
- Controllers
- Educator tablet
- WiFi router
- Mobile charging cart
- Expeditions 2.0 software
- Training
- 1-year warranty
- RobotLAB support



PRODUCT CATALOG



### PEPPER ROBOT

- The perfect host for the visitors to your lab
- Intelligent and autonomous robot
- Greet visitors and present them with the lab and the program offered at the school
- Can speak multiple languages
- Can display pictures and videos on the tablet embedded on its chest
- Can answer questions
- Can be programmed so students can develop new apps:

The solution comes with the following apps: Presenter, FAQ, Quiz Game, Selfies, and Dances



### AVAILABLE ADD-ONS FOR THE AI LAB STATIONS



### FABLAB

Incorporating a maker space in your lab gives students the opportunity to be creative and design. They can re-imagine their favorite characters, invent their own creations, and understand the process of 3D printing, mold making, and using various mediums as an art form. This is a creative space for innovation!

Examples of Subjects Covered: Engineering, Design, Science, Math, Physics, and Manufacturing

#### WHAT'S INCLUDED:

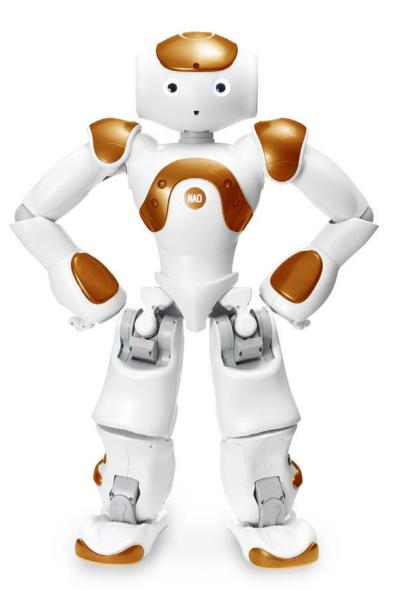
- 3D printer
- Laser cutter
- PLA filaments
- Accessories
- Software
- Curriculum



AVAILABLE PRODUCTS FOR THE AI LAB



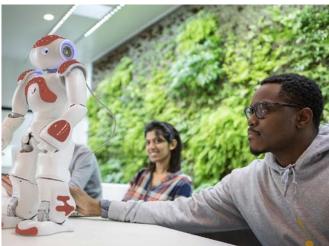
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### NAO ROBOT

NAO is a fully programable bipedal humanoid robot. NAO is the most recognizable of any humanoid robots in education. The reason? To put it quite simply it's highly versatile.

From use in cases with Autism therapy to dancing in a synchronized dance show to STEM ambassador and beyond, NAO is sure to fit the needs of just about any research study out there.



Main Features: Fully-programmable humanoid robot <u>Sensors:</u> 2-5 MP cameras, dual stream of the top and bottom cameras, tactile sensors, position sensors, 4 omni-directional microphones, 8 force sensitive resistors. <u>Programming Languages:</u> Drag/Drop C++, Pyhton, and Java <u>Mobile/Stationary:</u> Mobile robot that is more connected than ever with Bluetooth and faster and efficient Wi-Fi <u>Training:</u> Comes with a Free online one-hour on-boarding session <u>Warranty:</u> 2-year warranty



### NAO POWER V6 AI EDITION DESCRIPTION

- One NAO V6 (Copper of Rose Gold)
- 1 Charger and 1 Battery
- Unlimited Choregraphe Licenses
- 3-year Access to AI Skills
- Software License for 3D Simulator Tool
- Full SDK and API
- RobotLAB Support

Please contact us for pricing

# NAO POWER V6 STANDARD EDITION DESCRIPTION

- One NAO Power V6 (Dark Grey)
- 1 Charger and 1 Battery
- 1 year of warranty
- Unlimited Choregraphe Licenses
- User Manual
- Full SDK and API
- RobotLAB Support

- Please contact us for pricing



### NAO STARTER PACK

#### DESCRIPTION

- 1 NAO V6 Humanoid Robot (Dark grey)
- 1 Charger and 1 Battery
- 1 Docking Station
- 1 Teacher Laptop with pre-installed Software
   and 1 Router
- 1 Transport Case
- Unlimited Choregraphe Software Licenses
   and Full SDK
- STEMLAB Software User license for 1 year
- Onboarding and Orientation session
- 1-year Warranty & RobotLAB Support

Please contact us for pricing



### NAO STARTER PACK DUO DESCRIPTION

- 2 NAO V6 Humanoid Robots (Dark grey)
- 2 Chargers and 2 Batteries
- 2 Docking Stations
- 1 Teacher Laptop with pre-installed Software and 1 Router
- 2 Transport Cases
- Unlimited Choregraphe Software Licenses and Full SDK
- 2 STEMLAB Software User licenses for 1 year
- Onboarding and Orientation session
- 1-year Warranty & RobotLAB Support
  - Please contact us for pricing



### NAO CLASSROOM PACK

#### DESCRIPTION

- 3 NAO V6 Humanoid Robots (Dark grey)
- 3 Chargers and 3 Batteries
- 3 Docking Stations
- 1 Teacher Laptop with pre-installed Software
   and 1 Router
- 3 Transport Cases
- Unlimited Choregraphe Software Licenses and Full SDK
- 3 STEMLAB Software User licenses for 1 year
- Onboarding and Orientation session
- 1-year Warranty & RobotLAB Support
  - Please contact us for pricing

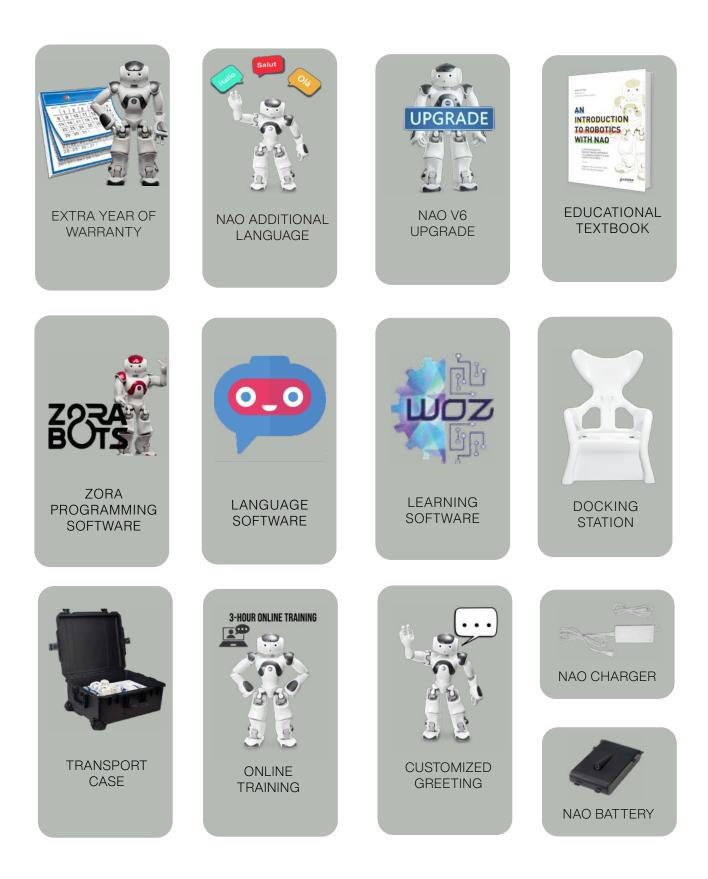


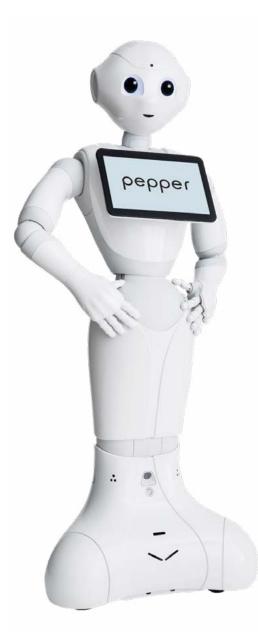
### NAO LAB PACK

#### DESCRIPTION

- 5 NAO V6 Humanoid Robots (Dark grey)
- 5 Chargers and 5 Batteries
- 5 additional Batteries
- 5 Docking Stations
- 1 Teacher Laptop with pre-installed Software and 1 Router
- 5 Transport Cases
- 20 NAO Robot Shirts
- Unlimited Choregraphe Software Licenses and Full SDK
- STEMLAB Software Site license for 1 year
- Onboarding and Orientation session
- 1-year Warranty & RobotLAB Support
  - Please contact us for pricing

### ACCESSORIES





### PEPPER ROBOT

Pepper, the most deployed humanoid outside of the classroom, is here and ready to take your program to the next level.

Pepper comes with full access to the SDK so that you can customize the 4ft tall humanoid to fit your needs. Pepper is being used today in healthcare, retail, banking, hospitality, and more!



<u>Main Features:</u> Fully-programmable humanoid robot for students ages 7 and up <u>Sensors:</u> HD Cameras, tactile sensors, position sensors, microphones, and force sensitive resistors.

Programming Languages: Drag/Drop C++, Python, and Java

Mobile/Stationary: Mobile robot that is more connected than ever with

Bluetooth and a faster and efficient Wi-Fi

Training: Comes with a Free online one-hour on-boarding session

Warranty: 1-year warranty









PEPPER ROBOT PREMIUM PEPPER ROBOT PREMIUM+ NAV VERSION PEPPER ROBOT ACADEMIC AMBASSADOR

### ROBOT MANAGEMENT SYSTEM SOFTWARE (BASE PACKAGE)

(ADD SKILLS)



- ROBOTLAB SKILLS PRESENTATION
- ROBOTLAB SKILLS FAQ
- ROBOTLAB SKILLS CONVERSATIONAL MODE
- ROBOTLAB SKILLS ENTERTAINMENT
- ROBOTLAB SKILLS RECEPTIONIST
- ROBOTLAB SKILLS -LEAD GENERATION
- ROBOTLAB SKILLS -TOUR GUIDE\*
- ROBOTLAB SKILLS PERSONALIZED INTERACTION \*
- ROBOTLAB SKILLS REMOTE CONTROL
- ROBOTLAB SKILLS -VIDEO CALLS
- ROBOTLAB SKILLS -ANALYTICS
- ROBOTLAB SKILLS -FLEET MANAGEMENT

### + ONLY AVAILABLE WITH PEPPER PREMIUM + NAV VERSION

Please contact us for pricing





### NEW VR APPS COMING JANUARY 2023!

New RobotLAB VR Kits

Are you ready to upgrade your VR kit? Look no further!

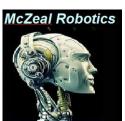
Starting in January of 2023, RobotLAB will now be offering a VR kit with something for every school in your district.

Our new partnerships with BeMoreColorful and Wild Immersion will let you take your student on 360 video excursions to real job sites, and animal habitats.

Join us as we explore the depths of the jungle to find videos of tigers and snakes- or on a trek to ice filled landscapes as we meet polar bears and penguins.

Instill career ambition with virtual reality day-on-the-job experiences to careers like wind turbine technician, dental hygienist, electrician, and so much more.

Take your students to every place they've learned about on a virtual field trip to solidify each lesson. Your students can become world travelers from the comfort, safety, and affordability of your classroom.



#### NEW FEATURES

Our new kit can be used as a teacher let experience, or as a student led experience! Take your students on a field trip all together or let them explore on their own.

#### WHAT DOES IT INCLUDE:

- Expeditions 2.0
- Career Exploration Experiences
- Wildlife VR Experiences
- Space Exploration
- Updated devices from Pico/Android with higher processing speeds and
- quality imaging
- Transport case or Charging cart

And more!





Contact us to find out more about our special district Level pricing for purchases of 3 or more kits!

Custom kits are also available. Please contact us to get a custom quote at: Sales@RobotLAB.com or +1 415 702 3033



## **VR EXPEDITIONS 2.0**

NDUSTRY 4.0

VR Expeditions 2.0 is the new virtual reality app created by RobotLAB in partnership with Encyclopedia Britannica<sup>®</sup>.

In the past four years, RobotLAB was the leading partner for Google Expeditions and the only one certified to ship Google Expeditions kits globally. After Google's decided to stop its VR efforts and discontinue Google Daydream and the Google Expeditions app, RobotLAB decided to take advantage of this opportunity and introduce VR Expeditions 2.0TM.

Our approach to education is unique. We ship VR classroom kits that are ready to teach. No setup, unboxing or installation is needed. Even your account is preconfigured! And direct access to our customer-success and support team will ensure your program's success.

Main Features: Virtual Reality for education

Options: There are 2 different options when it comes to VR headsets; the standard pack and the advanced pack. We also offer 360 VR cameras that allow users to create their own VR Expedition.

<u>Mobile / Stationary:</u> These are stationary until students place them on their head, and that is when the adventure begins!

<u>Training</u>: Comes with a free online onehour on-boarding session



Please contact us for pricing





#### **VR REALITY CLASSROOM** STANDARDARD PACK

- 10 Students
- 20 Students 30 Students

#### Teacher RobotLAB VR Expeditions 2.0 License

#### **VR REALITY CLASSROOM** ADVANCED PACK

- 10 Students
- 20 Students
- 30 Students





#### **AR/VR CLASSROOM PACK**

- 10 Students
- 20 Students 30 Students

Already have a VR kit? No worries! Expeditions 2.0 is compatible with most of the virtual reality headset available out there! Please contact us to learn how to upgrade to Expeditions 2.0!

Custom kits are also available. Please contact us to get a custom quote at: Sales@RobotLAB.com or +1 415 702 3033





# CLASS VR

ClassVR is a versatile platform using the power of virtual and augmented reality for education and training from the classroom to the boardroom. ClassVR offers a student-friendly interface, gesture controls, embedded educational resources, and simple-to-use teacher controls.



CLASS VR/AR PREMIUM KIT

CLASS VR STARTER KIT

Please contact us for pricing



Main Features: Virtual Reality for education Mobile/ Stationary: Stationary <u>Training:</u> No training required but available as an option. <u>Warranty:</u> 1-year warranty





Meet CoDrone, the first-ever programmable drone that was designed to teach you programming. It comes in a light and pro version and has many upsides for integration into the classroom. The CoDrone is for anyone who wants to learn how to code.

It also includes step-by-step tutorials to get you coding in no time. It only takes 10 minutes to learn and fly your CoDrone. Learn how to program your own custom flight patterns or even battle other CoDrones. It is light, safe for classroom use, sleek, and flies like a charm. Perfect for indoor use. It is also Arduino-based, meaning you'll learn real coding.



CODRONE PRO CLASSROOM PACK

- Please contact us for pricing

<u>Main Features:</u> Learn to code with drones. Perfect introduction to cod-ing.

<u>Student to Robot ratio:</u> 1 Drone per 3 students.

<u>Mobile/ Stationary:</u> Mobile drone <u>Training:</u> No training required - available as an option.

Warranty: 1-year warranty



## DOBOT ROBOTIC ARM



A high precision 4-axis robotic arm capable of grabbing, writing, drawing and 3D printing. The visual programming interface makes it easy to program it using drag and drop command functions. Dobot Magician V3 is a truly cuttingedge robotic arm made available for your STEAM or CTE program. It's a highly cost effective solution empowering 21st century skills and unleashes students' creativity.



Please contact us for pricing

Main Features: All-in-one Robotic Arm for STEM <u>Programming Language:</u> Drag & Drop , C++, Python and Java. <u>Mobile/ Stationary:</u> Stationary Robot <u>Training:</u> Available as an option <u>Warranty:</u> 1-year warranty









DOBOT STARTER PACK



DOBOT MAGICIAN

DOBOT MAGICIAN ROBOTIC EDU EDITION





INDUSTRY 4.0 ROBOTIC LAB



DOBOT CLASSROOM PACK

DOBOT MAGICIAN PRO

DOBOT ADVANCED PACK



-• Please contact us for pricing

# ACCESSORIES



#### Please contact us for pricing

# 

# KUKA ROBOT STATION

The KUKA Ready2\_Educate Station is an all-in-one solution designed to teach the basics of robot technology and automation. It includes the KUKA KR4 Agilus robot arm with the latest KR C5 microcontroller and smartPAD teach pendant. It is preconfigured for educational applications and a curriculum is also available.



- Please contact us for pricing

Main Features: All-in-one Robotic Arm Station <u>Curriculum</u>: Engineering, Robotics, Manufacturing, Design, Computer Science, Technology. <u>Mobile/ Stationary</u>: Stationary Robot <u>Training</u>: Available as an option

Warranty: 1-year warranty

# NIRYO ROBOTIC ARM

Niryo wants to make robotics accessible to everyone. It all began with the Niryo One, the first 6-axis collaborative robot for education and research, powered by Arduino, Raspberry Pi, and ROS.

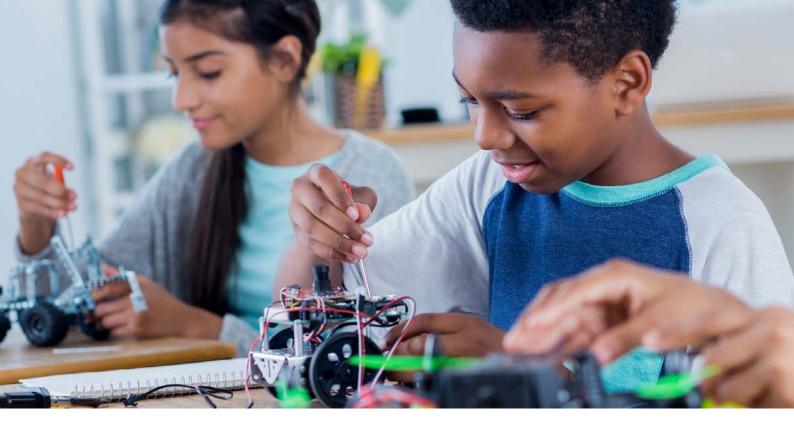
Ned, its successor, is an improved version with an aluminum structure that increases its robustness, its precision & repeatability (0.5mm). Niryo also provides a next-gen solution for industry based on robotics, vision and Ed.



- Please contact us for pricing

Main Features: A programmable kit for students K-12 <u>Programming language: Niryo</u> <u>Mobile/ Stationary:</u> Stationary robot <u>Training:</u> Available as an option <u>Warranty:</u> 1-year warranty





#### **RobotLAB Kits**

Handpicked by RobotLAB experts, these labs merge multiple products into comprehensive labs that expose students to various aspects of STEM, coding, and Al.

The labs are grouped by subject and age group. And they can be customized to support a various number of students. Each lab comes with full access to Engage EDU, our online learning platform, which offers hundreds of instruction hours based on the robots in the LAB. Main Features: All-in-one kits for K-12 Best For: High school, library, & summer camp Mobile/Stationary: Mobile and Stationary robots included

<u>Training</u>: No training requiredavailable as an option

<u>Warranty:</u> 1-year warranty



AUTONOMOUS CARS SCHOOL PACK



NASA CURIOSITY ROVER DIY



ROBOTLAB ELEMENTARY ROBOTICS CAMP

Please contact us for pricing



#### **RobotLAB Mobile Solutions**

Discover our complete turnkey solutions that enable educators and students to make the most productive and efficient use of the robots in the classroom. From equipment to software and curriculum, everything you need to make your program successful is included in a practical mobile charging cart.

## RobotLAB K-5 STEM Lab

We brought into one turnkey solution what we consider to be the best technologies to teach STEM and coding for grades K to 5. The RobotLAB K-5 STEM Lab is ideal for a classroom of 15 to 20 students and it includes everythinwg you need to make your program successful.



1 Cubelets Inspired Inventors Megapack
1 Dash&Dot Tech Center Pack
1 Ozobot Evo Classroom Kit (18 bots)
1 Teacher Tablet preloaded with software
1 Engage! K12 Courses 3-year Classroom
License (lesson plans, activities, and simulation tools)
1 Mobile charging cart
2-hour Online PD
1-year Warranty and RobotLAB Support



### RobotLAB 6-8 STEM Lab

We brought into one turnkey solution what we consider to be the best technologies to teach STEM and Coding for grades 6 to 8. The Engage! Middle School bundle includes everything you need to make your program successful.



2 Autonomous Cars School Packs

1 LittleBits STEAM Education Class Pack 1 Sphero Education Pack + 1-year Access to Sphero EDU

1 Teacher Laptop preloaded with software 1 Tablet

1 Engage! K12 Courses 3-year Classroom License (lesson plans, activities, and simulation tools)

1 Mobile charging cart

2-hour Online PD

1-year Warranty and RobotLAB Support

-• Please contact us for pricing



#### RobotLAB 9-12 STEM Lab

For grades 9 to 12. The Engage! High School bundle includes everything you need to make your program successful.



- 2 Autonomous Cars School Packs 1 LittleBits STEAM Education Class Pack 1 Sphero Education Pack + 1-year Access to Sphero EDU
- 1 Teacher Laptop preloaded with software 1 Tablet

1 Engage! K12 Courses 3-year Classroom License (lesson plans, activities, and simula-

tion tools)

1 Mobile charging cart

2-hour Online PD

1-year Warranty and RobotLAB Support



## MISTY ROBOT

Bring Al to life with Misty, the autonomous roaming robot your students can program to move around and interact with humans. Misty has an open-source platform and open hardware that is designed to delight robotics enthusiasts and institutions while still providing access to a high-tech tool.



Main Features: Fully-programmable robot for education Best For: High school, library, & summer camp <u>Mobile/Stationary:</u> Mobile robot <u>Training:</u> No training required- available as an option <u>Warranty:</u> 1-year warranty

-• Please contact us for pricing

#### ACCESORIES



MISTY BACKPACK FOR ARDUINO



MISTY ROBOT STARTER PACK



MISTY ROBOT DUO PACK



MISTY ROBOT LAB PACK



## **KEBBI AIR**

Kebbi Air is not merely a multi-functional technology product. It is a delicate design that delves into people's needs.

It combines educational theory and trends to tailor the hardware, software and applications of a robot The purpose is to turn digital content into a real companion in the real world.

And what's more, the aim is to make kids' mental and physical development more natural and comprehensive. Let Kebbi Air become a new member of your family, and play, learn, and create with it together!

<u>Main Features:</u> STEAM Coding Education, theatrical english learning, motion sensing to pull together.

<u>Mobile/Stationary:</u> Mobile <u>Training:</u> comes with a free online-one-hour onboarding session. <u>Warranty:</u> 1-year warranty



# MIRO E

MiRo is an advanced animal-like robot designed to help students learn about STEM subjects, particularly computing and digital technologies. MiRo-E has been built on years of technical research and multiple MiRo iterations!

MiRo-E is jam-packed with a wide range of sensors, significant degrees of freedom of which many provide MiRo-E's excellent expressive communication abilities and more.





MIRO-E EDUCATOR PACK



MIRO-E DUO PACK

Please contact us for pricing



MIRO-E LAB PACK

Main Features: MiRoCode is a user-friendly web-based coding interface, where students can run trough lesson plans and experiment with new ideas. They can test code on the simulated MiRo-E and create new skills that can be applied to a real Ife MiRo-E. Best For: High school, library, & summer camp Mobile/Stationary: Mobile robot Training: No training required- available as an option Warranty: 1-year warranty



#### OZOBOT

The Ozobot STEM education program presents an innovative way to teach subjects like programming, math and science in classrooms, after-school clubs or at home. See kids become engaged and inspired when topics come alive with the help of Ozobot.



OZOBOT EVO CLASSROOM KIT 12X



OZOBOT EVO CLASSROOM KIT 18X

Main Features: Mobile and programmable robot Programming languages: Drag&Drop (Blockly) Mobile/Stationary: Mobile Training: comes with a free online-one-hour onboarding session. Warranty: 1-year warranty





Dash & Dot are robust robots that are ready to go, right out of the box. Dash & Dot are responsive robots packed full of capabilities that allow them to interact with students, their environment, and each other thanks to their multiple built-in motors, sensors, LEDs, and audio capabilities.

Using Blocky with Dash & Dot, teachers are empowered to bring coding skills into their classroom while addressing Common Core math or ELA standards.



• Please contact us for pricing

Main Features: Mobile and programmable robot for students 8 and up <u>Sensors:</u> Distance sensors, sound sensors, proximity sensors, beacon sensors, and accelerometers. <u>Programming Languages:</u> Drag&Drop interface <u>Mobile/Stationary:</u> Mobile robot <u>Training:</u> No training required- available as an option <u>Warranty:</u> 1-year warranty



CUE 12-PACK



DASH 6-PACK



## KAI'S CLAN

A place where the physical and the virtual worlds merge to become an interactive learning playground. Students code their robots to navigate the mat in real life, in real time, wherever they are in the world. At the same time their 3D characters collaborate in a virtual environment. Kai's Clan breaks the traditional geographical barriers to bring kids from around the world together and allows them to solve challenges in exciting new ways.





BOOSTER BOTS 4 PACK

CLASSROOM PACK (12)



STARTER PACK (4)

#### ACCESORIES

Please contact us for pricing



MARS DISCOVERY AR/VR MAT



AR/VR MAT







<u>Main Features:</u> Mobile and programmable robot <u>Programming languages:</u> Drag&Drop (Blockly) <u>Mobile/Stationary:</u> Mobile <u>Training:</u> comes with a free online-one-hour onboarding session. <u>Warranty:</u> 1-year warranty



## CUBELETS

Develop Problem-solving skills and computational thinking. Spark the next generation of innovators by introducing procedural thinking, cause and effect. decomposition of complex tasks, pattern recognition, the ability to notice similarities or common differences, abstraction and algorithm design and the ability to develop a step-by-step strategy for solving a problem, all using Cubelets robots.

Cubelets are magnetic robot blocks that can be snapped together to make an endless variety of robots with no programming and no wires. You can build robots that drive around on a tabletop, respond to light, sound, and temperature, and have surprisingly lifelike behavior.

Endless possibilities, endless fun, endless learning. Unlock your students' potential, today! The cubelets CLASS package comes with 84 magnetic blocks that can be snapped togeth er to make an endless variety of robots with no programming and no wires. Main Features: Mobile and programmable robot for students ages 7 and up <u>Sensors:</u> Knob, brightness, Distance and Temperature <u>Programming Language:</u> C <u>Mobile / Stationary:</u> Mobile Robot <u>Training:</u> No training required, available as an option Warranty: 1-year warranty



Please contact us for pricing





CUBELETS CLASSROOM PACK



CUBELETS CREATIVE CONSTRUCTORS PACK



CUBELETS CREATIVE CON-STRUCTORS PLUS PACK



CUBELETS BRILLIANT BUILDER PACK



CUBELETS INSPIRED INVENTORS MEGA PACK

LIFE SCIENCE

EXPANSION PACK



CUBELETS MINI-MAKER PACK

#### ACCESSORIES



ENGINEERING EXPANSION PACK



COMPUTATIONAL THINKING EXPANSION PACK



BATTERY ESSENTIALS

PRODUCT CATALOG



# ZUMI

A friendly, self driving car kit that makes learning about Artificial Intelligence (AI) accesible for both kids and adults. Zumi can learn! Learn about how artificial intelligence (AI) works by training Zümi to navigate an environment. The more she learns the environment, the better she becomes at navigating.

Al can be an abstract and complicated subject, but Zumi is here to help. Help her learn more about the world she lives in so she can navigate more, and you'll also learn skills that will soon become an integral skillset for the future.



---- Please contact us for pricing

<u>Main Features:</u> Learn about how Artificial Intelligence works by training Zumi to navigate and environment. The more it learns the environment, the better she becomes at navigating.

<u>Curriculum:</u> Covering robotics, Technology, Coding and Programming. <u>Mobile/Stationary:</u> Mobile robot

Training: No training required- available as an option

Warranty: 1-year warranty



# MAKERSPACE

DREMEL

Implement 3D printing in the classroom with the new Dremel Digilab 3D45 printer that offers high performance and includes everything you need for your maker-space. Create your own maker-space with the state-of-the-art product and teach your students how to solve open-ended problems by creating their own models and prototypes.

<u>Main Features:</u> Ability to create models and prototypes. <u>Mobile / Stationary:</u> Stationary Robot <u>Training:</u> No training required, available as an option <u>Warranty:</u> 1-year warranty

Please contact us for pricing



DREMEL DIGILAB 3D45 EDU 3D



DREMEL 3D PRINTER 3D40 EDU PRINTER



DREMEL DIGILAB LASER CUTTER

#### ACCESORIES



PLA FILAMENT 10-PACK



#### SPECIAL EDUCATION





Use the NAO Robot for your special education program to provide a bridge for children on the autism spectrum from isolation to greater social and academic engagement.

NAO Special Ed Pack The comprehensive solution designed to assist teachers and childcare workers in the support of autistic children. It's a solution that includes the robot NAO, the Special Ed NAO Software, and a range of fun and educational activities and applications are specially written to meet the needs of autistic children.

#### **VR FOR SPECIAL EDUCATION**

RobotLAB is leveraging the power of Virtual reality to offer a supplementary method of teaching social and communication skills to individuals with Autism Spectrum Disorder (ASD). The library of lessons is fun and engaging for the learner, while also providing a supervising adult the opportunity to monitor and track the learner's progress.





#### QT ROBOT

Children with autism often have a high interest in technology and usually feel comfortable working with computers because of their rule-based and predictable nature.

QTrobot as an embodied technology stands somewhere between a computer and a social being. It offers various benefits of technology such as consistency, simplicity and predictability, but it also has a character providing an engaging environment for social learning.



Please contact us for pricing

#### **KEBBI ROBOT**

Kebbi is an Educational Robot that integrates artificial intelligence, software and hardware technology with a variety of facial expressions, body movements, and communicative interactions. Kebbi has simplistic features and a compact size making it easy to interact with students through personalized lessons delivering a unique set of capabilities that work very well for the home or school environment. The interactive capabilities provide users with a fun, heartwarming educational experience.



If you are interested in a specific product and want to learn more, please go to www.RobotLAB.com/classroom-robots You'll be able to get more details about each product such as: educational benefits, specifications, what's in the box, options available, etc. You can also reach to us directly by email at Sales@McZealRobotics.com or by phone +1 (832)-930-3777

Our team of experts will be delighted to help you choose the right solution for you!

From the entire RobotLAB team, thank you!

For price quote requests, please email Sales@McZealRobotics.com send your Purchase Orders to PO@McZealRobotics.com

www.McZealRobotics.com

