



PTO GIFTS PROGRAM

Requests for PTO Funding 2016-17

Any teacher, parent, or student who has a request for funds from the PTO must fill out this form. Please answer these questions as thoroughly as possible, providing supporting detail and information. When completed, please return to the administration at either school by **Friday, October 21, 2016**.

1. Define your request:

We would like to add two new robotics kits and their resources in addition to more Osmo kits to the Coding Kids program.

2. Amount requested:

Current cost breakdown for items totaling **\$1,560.80** is listed below:

Item	Quantity	Cost	Shipping	Total
KIBO kits	2	\$399.00	--	\$798.00
KIBO teacher resources	1	\$140.00	--	\$140.00
Expression modules	2	\$20.00	--	\$40.00
KIBO materials with subtotal/shipping:		\$978.00	\$97.80	\$1,075.80
Osmo Explorer Kit	2	\$189.00	\$0.00	\$378.00
Osmo Pizza Company	2	\$39.00	\$0.00	\$78.00
Osmo Numbers	1	\$29.00	\$0.00	\$29.00

3. Can this project be funded in stages? If yes, what timetable is involved? If no, please explain your due date for funds.

Ideally all projects that use these items will run concurrently throughout the year if the entire amount is funded at the same time.

4. Has this request been reviewed by the school administration? What was their response as to its merit and priority?

Mary Frances Greene and Sheri Styczen support this proposal.

5. Number of Students that will be impacted or benefit from your request:

Our Coding Kids program has 75 students participating in the fall session. Throughout the year new students join subsequent sessions bringing the total closer to 100 out of our current population of 194 students served over the school year. When used for whole-school activities (e.g., National Robotics Week “Robots on Tour”) every student has the opportunity to interact with the same tools we use in the Coding Kids program. We would like to test the KIBO robotics kit with blended art/music projects that would allow small groups of students to apply what they learn outside of the Coding Kids program. Osmo kits have become very popular learning tools. We would like to provide access to the Coding Kids so they can try all of the available components and we can make recommendations to classroom teachers. We currently have one “genius” kit (tangrams, words, and numbers) that all students must take turns using.

6. Is this a one-time request or do you envision needing additional PTO funds in the future or long range? If you will require additional PTO funds, please explain why this cannot be added into your annual budget.

The items covered here are a part of a one-time request. Once tested, additional kits could be purchased by the school or classroom teachers to provide more access as needed.

7. What is the intended goal of your request? Would it have any other uses or applications? Is this a start up program or is it enhancing an existing program? Use additional paper if needed.

Both of the kits requested (KIBO robotics and Osmo) provide a tangible hands-on blending of technology with the physical world. KIBO robotics differs from many current robotics kits because it is a self-contained system that uses no device. The visual programming language was developed to be used with kids as young as 4-5 and scale all the way up to 7-8 with more advanced parameters (intricate repeat loops and functions via parameter cards). The developmentally appropriate system uses wooden blocks with barcodes that are physically scanned by the robot.

KIBO robotics is a way for students to learn about programming concepts including sequencing, modularity, cause-and-effect and patterns. The programming concepts can be used in academic/specials areas like math, literacy, art, music and science. Material guides include activities like “How Things Move” and “Dances from Around the World” and many others. KIBO provides an expandable robotics system through their advanced programming blocks, interchangeable modules/sensors and art platforms. New modules are developed regularly and tested with teachers. KIBO is also unique due to the ease of use that provides a low barrier for entry with students who may be more interested in the artistic components of telling a story through the interactions with the robot rather than the technical side of building (e.g., LEGO robotics) or programming with a device.

Osmo kits require an iPad but use of the system is not focused on the device. Students are able to use a variety of components (e.g., tangrams, letter tiles) with the various free apps. Students especially enjoy the artistic expression elements that come from the “Masterpiece” app, providing a stop motion video of completed drawings they do with the app. One of the

newest components includes a creative set designed for use with the new "Monster" app. The Monster component allows students to take their drawings and make them part of an animated story, acted out with their interactive "Monster" guide, Mo. The Pizza Co. is another new component that allows students to practice sorting and math in a fun way. Students make pizza with specific toppings, add up the costs and make change - all through interactive tiles that the Osmo system can "see" and provide feedback on (e.g., incorrect change or wrong toppings). Once students are familiar with setting the Osmo kits up, they can be used in learning center rotations. Providing two more full kits along with Pizza Co. would allow us to test the new modules (we have one original starter kit now) and provide feedback to teachers.

8. What are the long range benefits of your request?

Time exploring with Osmo and designing activities around the robots are two of our biggest requests for student-directed options in the Coding Kids program. We would like to encourage students to create more and provide them the tools to do just that. The primary goals for any tools we use are that they should provide learning opportunities within the powerful ideas related to positive technology use. The tools we use work within the framework to address the behaviors we want to facilitate in classroom practices. The six C's we address fall into the intrapersonal and interpersonal domains. Intrapersonal: content creation, creativity, choices of conduct. Interpersonal: communication, collaboration, community building.

As with our other request, providing a handful of new tools or enhancements to the Coding Kids program will benefit students now and in the future. Since none of the materials are consumable we can use them for years to come. We are also able to provide classroom activities based on the ideas generated and tested in the program. The Coding Kids program helps reinforce the maker culture that empowers students to not only try new things but to dream about the "what ifs" and then create/build something tangible from those dreams.

9. If you are requesting a capital asset/investment, please provide a minimum of two options/pricing quotes on the item and attach to this form. Please identify your first choice and why.

N/A

10. Have you exhausted all other funding options before coming to the PTO Gifts Program?

We are looking to test these items through the PTO Gifts Program prior to making any larger purchase requests.