



For immediate release

Contact: Andrea Kisiel,
One8 Foundation | Mass STEM Hub
Phone: 857-202-6238
Email: akisiel@one8.org

110+ Middle school students showcase adaptive toys to Boston Children's Hospital doctors, designed for cerebral palsy patients

Boston Children's Hospital doctors and STEM professionals provide authentic feedback to students' applied learning projects

[Boston, MA, June 4, 2019] Congratulations to student teams from Morton Middle School (Fall River), Medway Middle School (Medway), Stoneham Central Middle School (Stoneham), and Community Day Charter Public School-Prospect (Lawrence) for winning awards for their adaptive toy designs presented at the second annual [Mass STEM Hub](#) Design Showcase. This showcase was held for [Project Lead The Way](#) middle school students by Mass STEM Hub, a program of the One8 Foundation, in partnership with Boston Children's Hospital at Merck Research Labs on June 4th, 2019.

110+ middle school students from 16 Massachusetts schools were selected to represent their schools to present adaptive toy prototypes to STEM professionals. In PLTW's middle school engineering Design & Modeling unit, students learn the engineering design process, critical measurement and mathematical modeling skills, computer-aided design skills, and about cerebral palsy. The culminating project challenges students to design, test, and fabricate an adaptive toy for a child with cerebral palsy.

The applied learning curriculum of PLTW covers critical STEM content and allows students to use what they have learned to solve real world problems. The One8 Foundation and the Baker-Polito administration are scaling PLTW in the Commonwealth. Today 35,000 students are engaged in PLTW classrooms across the state.

Governor Charlie Baker addressed students at the event, expressing the importance of applying what is taught in the classroom to solve real-world problems for the greater good. He also activated a round of applause in gratitude for the hard work of dedicated teachers.

"Introducing more students to the possibilities STEM offers is critical to the future of the Commonwealth, and ensuring all students have opportunities to study STEM is a priority for our administration," said **Governor Charlie Baker**. "We want to congratulate all of students from across Massachusetts that participated in the Mass STEM Hub Design Showcase and we applaud Project Lead The Way and the One8 Foundation for all of the work they are doing to prepare students for future success."

To connect their classwork to problems solved in the real world, students received expert, authentic feedback from industry experts, from organizations including Boston Children's Hospital's Cerebral Palsy & Spasticity Center, Merck Labs, Microsoft, Smith & Nephew, and National Grid.

"The student projects at the Mass Stem Hub Design Showcase continue to amaze all the physicians and allied health professionals who represent the cerebral palsy clinic. It is great to see the students' projects - a summary of a lot of collaboration and problem solving with the ultimate goal to improve the quality of life of children with disability," noted **Dr. Benjamin Shore, Co-Director of the Cerebral Palsy and Spasticity Center at Boston Children's Hospital**. "The various designs and innovative strategies created by the teams of students demonstrates an understanding of physical disability well beyond their years. As a member of Boston Children's Hospital and representative of the Cerebral Palsy Clinic, we are proud to host and sponsor this very important educational event."

In attendance was Rachel Caliguiri, who has been a patient of Boston Children's Hospital since she was diagnosed with cerebral

palsy at the age of two- and has seen amazing progress as a patient of Dr. Benjamin Shore. Rachel is graduating from high school and starting college in the fall.

“I am so glad I get to see all of the projects that the kids have made, and hopefully they can help other kids in the future,” **said Rachel Caliguru.** “I saw one [toy] which is awesome for fine motor control. I saw a big board game [that] helps with gross motor control. I would have played with all of them!”

After viewing student work, judges scored projects to determine award winners. **Sandra Fenwick, Boston Children’s Hospital CEO,** presented awards to winning student teams.

The Showcase Winner Award was presented to a group from Morton Middle School in Fall River for their project titled “Speed Roller,” designed to provide children with spastic diplegia a fun way to practice walking. Judges chose this team for displaying the highest overall mastery of the engineering design process and conveying a deep understanding of the therapeutic needs of children with cerebral palsy.

A team from Community Day Charter – Prospect in Lawrence won the Excellence in Presentation Award for their clear, concise presentation of their toy design, a bear-shaped activity block to help with fine motor skills.

Members of the Cerebral Palsy and Spasticity Center at Boston Children’s Hospital chose students from Medway Middle School as the winner of the Practitioners’ Pick Award – an award for the project that showed the most promise of real-world application. This group of students created a multi-functional fidget cube to assist with cognitive and physical therapy.

Lastly, students from Stoneham Central Middle School won the Engineers’ Choice award. This team presented a toy called “The Scramble Box,” which the engineers in attendance recognized as the most technically strong prototype.

“I’m excited for the students. This is a great opportunity – something that I never experienced when I was younger,” noted **Joseph Michael, Project Lead The Way teacher at Kuss Middle School in Fall River.** “It’s great that Project Lead The Way is allowing the connection between community and industry to public education.”

Mass STEM Hub partnered with Boston Children’s Hospital to create this opportunity for students to showcase their projects to industry professionals.

“In today’s rapidly changing world, students need to learn to be adaptive, critical thinkers ready to solve complex problems and clearly communicate solutions,” commented **Katherine Skrivan, Director of Mass STEM Hub.** “We are thrilled to provide the opportunity for students to showcase their hard work and receive formative feedback from Boston Children’s Hospital experts.”

National Grid and GE Foundation are founding event sponsors of Mass STEM Hub.

PARTICIPATING SCHOOLS:

Collins Middle School, Salem	Lafayette School, Everett
Community Day Charter – Gateway, Lawrence	Leicester Middle School, Leicester
Community Day Charter – Prospect, Lawrence	Medway Middle School, Medway
Community Day Charter – Webster, Lawrence	Morton Middle School, Fall River
Granite Valley Middle School, Monson	Randolph Community Middle School, Randolph
KIPP Academy, Boston	Sandwich STEM Academy, Sandwich
KIPP Academy, Lynn	Stoneham Central Middle School, Stoneham
Kuss Middle School, Fall River	Thomas Prince, Princeton

--

Mass STEM Hub is a program of the One8 Foundation and its mission is to provide schools with access to and support for the next level of STEM education that engages students and prepares them to succeed in a rapidly changing, high tech world. Mass STEM Hub has helped scale Project Lead The Way’s K-12 curriculum in engineering, computer science and biomedical science to over 35,000 students in Massachusetts, enabling students to learn how to take theory to practice with real world problem solving.

###

If you would like more information about this topic, please email akisiel@one8.org