Students Showcase their Inventions & Skills at Regional Challenge Event:
May 11, 12:30-3PM at Gaithersburg High

Get a glimpse of the future — and the kids who will invent it. On Saturday, May 11, over 850 local middle school students will showcase their inventions at the Invent the Future Challenge Summit. The students have designed and prototyped solutions to real-world environmental problems — with amazing results — but the true focus of this partnership program between KID Museum and Montgomery County Public Schools (MCPS) are the skills the students have learned along the way, and the ecosystem (schools, government, organizations, private corporations) that was created to provide them with what they need to succeed in the future.

The public is invited to interact with students and their inventions from 12:30 to 2:00 pm, and attend the Awards Ceremony from 2:00 to 3:00 pm. The Awards Ceremony features Keynote Speaker Shanika Hope of Amazon Web Services, as well as Montgomery County Executive, Marc Elrich, and MCPS Chief Academic Officer, Maria Navarro. Student inventions will be reviewed by a team of judges, which include professionals from NOAA, NIST, Pepco, Emergent BioSolutions, University of Maryland, UMBC, and Johns Hopkins, among others.

“The Invent the Future Challenge provides students with the opportunity to engage deeply in creative problem solving,” explains Cara Lesser, Founder and Executive Director of KID Museum. “They are given the freedom to design, to build, to fail, and to create something totally their own. As they work collaboratively with their peers, they build prototypes to solve a problem, and develop skills they will rely on throughout their lives.”
Dr. Jack Smith, Superintendent of Montgomery County Public Schools, agrees: “Career success increasingly depends upon creative problem-solving and innovative thinking. Our partnership with KID Museum allows us to work together to strengthen these abilities in our students so they are prepared to thrive in the workforce of the future.”

A sampling of the almost 200 inventions at the Summit include: “The Freez-a-tron,” which creates ice to stop the melting of the polar ice caps (Parkland Middle School); the “Hydroelectric Dam Desalination System,” designed by Gaithersburg Middle School students; and flying carbon dioxide collectors created by one of the Benjamin Banneker MS teams. Prizes are awarded in the categories of idea, process, and presentation, as well as an audience choice award. Winners receive tickets to Six Flags America amusement park.

KID Museum and MCPS launched the Invent the Future Challenge in 2017 with the goal of increasing innovative thinking and an interest in STEM among middle school students (an age when creativity and engagement in learning typically decline). Now in its second year, the Challenge has grown to over 850 students representing almost every middle school in the district, plus some regional independent schools — with the majority of students from populations traditionally underrepresented in STEM. Student cohorts from high FARMS rate schools are funded to visit KID Museum five times over the school year for intensive skill-building workshops in coding, fabrication, design process, and prototyping, as well as in “21st century” and social-emotional skills like persistence, critical thinking, and collaboration.

The students chosen for the cohorts are not necessarily the highest performing, or the “science kids.” Sascha Simkanich, who teaches computer science and engineering at Roberto Clemente Middle School in Germantown, looks for seventh graders with a GPA of 2.8 or higher, with an emphasis on girls and students of color. Over the year, he sees them transform: “I see an increased sense of pride and self-confidence,” he says. “They’re enthusiastic about learning and coming to school, in particular on days that we are going to KID Museum.”

Multi-year assessments by the PEAR Institute at Harvard Medical School and McLean Hospital confirm that students in the Invent the Future program are making big gains in areas like STEM interest and enjoyment, critical thinking, and perseverance.

Dayanara, a seventh grader at Clemente, whose team created an underwater trash retrieval device called a "Trashmarine," says, “You learn things in a more fun way here. It sticks with you. In school, you learn it, but it doesn't always stick." As part of their partnership, MCPS and KID Museum are developing curriculum and professional development to make it “stick,” bringing this type of learning into the classroom as well.

Invent the Future Challenge Summit sponsors include MCPS, The Jim and Carol Trawick Foundation, Inter-American Development Bank (IDB), Best Buy, Six Flags, Montgomery College, and M&T Bank.
About KID Museum
KID Museum is an independent, mission-driven nonprofit serving 55,000 people annually in its creative learning space, on-site at schools, and at community events. A national leader in maker-based education, the museum seeks to spark the creative potential of all children, and inspire the next generation of innovators. Core to its mission is ensuring that all youth, especially those who are traditionally underrepresented in STEM fields, have access to transformative learning opportunities that will pave the way for their future success — and the shared success of our community. For more information, please visit www.kid-museum.org.