

# Small Beginnings, Big Ambition: KID Museum

*By Emma Sussman Starr*

KID Museum is a creative learning space dedicated to empowering the next generation to invent the future with creativity and compassion. Our prototype site on the first floor of a Montgomery County, Maryland, public library is a step toward the museum's vision of a larger, permanent home.

Founded seven years ago as a “museum without walls” (meaning that we traveled to deliver programming), KID Museum worked with the local government to secure a physical space in 2014, in the unused lower level of Davis Library in Bethesda, Maryland. That 7,500-square-foot (697-square-meter) space is now a dynamic learning center filled with children and families seven days a week. Through onsite programming and offsite festivals and events, we serve 55,000 visitors each year with hands-on, maker-based programming that incorporates STEM, art, and world cultures with 21st-century skills like creativity and critical thinking.

Being small means that KID Museum educators have the opportunity to prototype new programs in a quick time frame, and experiment with techniques in a way that might not always be possible in a larger institution. For example, KID Museum recently piloted an intensive robotics program for third graders. Our educators worked directly with Montgomery County Public Schools (MCPS) to quickly create a curriculum and enlist two schools that receive Title I funds (U.S. funding for schools with high percentages of children from low-income families). Within a few months, we developed and executed the program, which included three field trips to KID Museum, two sessions at the schools, and professional development for teachers. The pilot was a success, and the school system wants to expand the program to more schools next year.

To accommodate our space limitations and maximize capacity, we offer different programs at different times—for example, families can drop in during the weekends for hands-on activities and workshops, while school field trips and intensive school programs like Invent the Future Challenge are scheduled during the week (we often serve as many as three different groups a day), as are after-school programs and camps.















Visitors check out student inventions during KIDfest, the KID Museum's annual maker festival. Photo courtesy KID Museum

Because we don't have the capacity to serve everyone in our physical space, we further our reach by going out into the community. Our signature maker festival, KIDfest, held each September in downtown Silver Spring, is free and attended by 15,000 people from the greater Washington, D.C., region. We also host the World of Montgomery Festival, which is attended by 8,000 people and reflects KID Museum's focus on global citizenship and understanding world cultures through immersive activities. In addition, we participate in school STEM nights and partner with afterschool programs like Excel Beyond the Bell to bring high-impact learning experiences directly to students in areas affected by poverty. Due to our small staff, we don't have a dedicated outreach team. Our educators rotate between onsite and off-site programs, giving them greater perspective on the needs of our community.

Partnerships with local government, businesses, and schools, are essential to the success of KID Museum. Our largest partnership, with MCPS, began with 30 students from one middle school in

2014. In just four years, that number has grown to almost 1,000 middle school students—most from families affected by poverty or traditionally underserved in STEM. This was possible in part because of the strong relationships we've developed with MCPS leadership and individual schools. We've also invested in measuring the strength of our programming by hiring a part-time researcher and evaluator, and by participating in a study developed by the Partnerships in Education and Resilience Institute at Harvard Medical School and McLean Hospital. Results showed that our students demonstrated significant increases in 21st-century skills and STEM interest. School districts like MCPS, one of the largest and most diverse in the nation, recognize the benefits of partnering with organizations like ours, which provide hands-on, transformative learning experiences that can make real strides in closing the achievement gap.

As a small, evolving museum, we are always learning and growing—a growth mindset we intend to continue to cultivate regardless of our size. We can

Third graders (left, above) learn to code in the Robotics Pilot Program. Photo courtesy KID Museum

Third and fourth graders (left) drill and build at summer camp. Photo courtesy KID Museum





Fifth through seventh graders attend a KID Museum summer camp. Photo courtesy KID Museum

quickly and efficiently respond to teacher, student, and administrator feedback on program design and curriculum integration. We're also able to pilot multiple iterations of our programs to broaden participation and maximize effect.

For example, the cornerstone of our partnership with MCPS, the Invent the Future Challenge, began as Invention Studio, a program in which students pre-selected an area of interest (such as aerodynamics or robotics) and then built a project. The next year, the program grew in size and, at the same time, the program design evolved to give all students training in all skill areas before they specialized in one for their project. Feeling that this was too prescribed, educators again refined the program to its current format—a more open-ended approach that gives each student access to the same skill-building experiences (in electronics, coding, fabrication, and the engineering design process), which they can then use to build their own invention. The latest iteration focuses more on the design process, providing a grounding for a more self-directed experience,



Middle school girls build their Invent the Future Challenge prototype. Photo courtesy KID Museum

and is more aligned with the museum's learning philosophy.

KID Museum's size has allowed us to take risks, respond to our community, and have an effect both in and out of the classroom. We're actively working hard to grow larger so that we can provide even more children with transformative learning experiences and meet the ever-increasing demand for our programs. But no matter our size, we'll be taking the innovative mindset and maker mentality of a small organization along with us. ■

---

**Emma Sussman Starr** ([emma@kid-museum.org](mailto:emma@kid-museum.org)) is director of communications at KID Museum in Bethesda, Maryland.