

The Joint Standing Committee on Education and Cultural Affairs Testimony from Kate Dickerson, Maine Discovery Museum

## In Support Of

L.D. 281

An Act to Provide Support for Certain Maine Discovery Museum Science, Technology, Engineering, and Mathematics Educational Programming Throughout the State

10 April 2025

Senator Rafferty, Representative Murphy, and distinguished members of the Education and Cultural Affairs Committee, my name is Kate Dickerson and I'm the Executive Director of the Maine Discovery Museum. Thank you for the opportunity to testify in support of L.D. 281, An Act to Provide Support for Certain Maine Discovery Museum Science, Technology, Engineering and Mathematics Educational Programming Throughout the State.

For those of you who aren't familiar with Maine Discovery Museum (MDM), our mission is to is to help people of all ages to discover the world around them through creative exploration and science. We opened in 2001 as the largest children's museum north of Boston, and still today have the largest exhibit space. In 2012, the Board of Directors and Executive Team realized that there was a significant need in Maine for comprehensive, engaging, informal education in science, technology, engineering, and mathematics (STEM), and MDM worked to fill that void. We serve approximately 60,000 people in the museum itself, and another 15,000 people outside our walls.

Beginning with the launch of the Maine Science Festival (MSF) in 2015, producing Maine Invention Convention (MIC) since 2018, and expanding our science education and enrichment outreach programming (Science Around ME; just last summer our team drove over 4,000 miles and served over 1000 kids in grades 3-8 through a grant funded program from the Franklin Institute of Philadelphia), MDM now serves Mainers of all ages throughout the state. A key feature of our work is serving rural and disadvantaged communities, either by going to them with Science Around ME, or providing programs at no charge (MSF and MIC): 94% of our mission-driven programming is provided at no charge to attendees.

You may rightly ask why we need state support if we are already serving so many people. As we have all experienced, the world is different since the COVID pandemic. While MDM survived, and a fair number of children's museums in the US did not, we have had to face the fact that our donor base is smaller and less able to provide to support. This is also true of specific sponsors for programs; we have lost long-time financial support and have to spend more and more time to just hold the sponsors we have. There is also the difficulty of getting foundation support. Many foundations are only interested or able to support new programs, often with the expectation that the organizations only need to show proof of concept and other funders will step in. Or, alternatively, once the programs are established, fees to access them and sustain the program will be implemented. And while we have been – and will continue – to look at every possible avenue for foundation support, there is a limit to what is available to us.<sup>1</sup>

While MDM is no stranger to charging for some of our programs, admissions, and events, LD 281 is explicitly to provide a baseline of support for the three programs noted above. These programs have been designed to teach kids and adults about science in Maine, as well as the value and importance of innovation and critical thinking. It

<sup>&</sup>lt;sup>1</sup> An example of how we pursue grants: in 2023 and 2024, we applied for 24 grants to cover the operational expenses for the three programs named here. Of those 26 different grants, we received funding from four. This grant total covers just these programs, not the full total of grants MDM has applied for in these years.

is critically important to MDM and to our mission that these specific programs are not behind a paywall, and that they remain available to every Mainer, regardless of their economic status. It is becoming increasingly difficult to raise the funds to run these programs, and the support provided by LD 281 would give us a baseline of support that we can use to not only maintain what we are able to offer, but to expand the reach of these programs.

I also note the value of having a museum that leans into informal, hands-on learning, identified as an important part of the educational ecosystem. MDM serves as one of the legs of a stool along with the formal education system (K-16) and family/community. The National Science Teachers Association has recognized the value and importance of informal learning opportunities for pre-K-12 students, "especially students from communities underrepresented in STEM fields, to promote their interest in and readiness for school science." 95% of science learning throughout a lifetime happens outside of school settings. And even during school-aged years, no more than 20% of student's time is spent in school. Our work is critical to helping engage, encourage, and connect with what kids are learning in schools. As reported by WABI on March 22nd:

Maddison Spring, 12, says these opportunities bring in-school learning to the next level: "Most of the time in classrooms, they like show pictures of like what it looks like, but with hands on, you can actually tell if it's rough or smooth or like what it feels like and stuff, besides just seeing it on a screen."<sup>5</sup>

Finally, I'd be remiss if I didn't note that public support for MDM would put Maine in alignment with other states who provide support for museums where the average government support for museums like ours is 20-24% of the operating budget.<sup>6</sup> The funding provided by LD 281 would allow us to not only continue to provide 94% of our mission driven programming at no charge, but to expand it.

Thank you for your time, attention, and service to our great State. I'm happy to answer any questions you may have.

Sincerely,

Kate Dickerson Executive Director

Maine Discovery Museum

Founder, Maine Science Festival

Member, Maine Innovation Economy Advisory Board

programs of















<sup>&</sup>lt;sup>2</sup> National Science Teachers Association, Learning Science in Informal Environments, Position Statement, August 2012.

<sup>&</sup>lt;sup>3</sup> Falk, J. H., & Dierking, L. D., 2010, American Scientist, vol. 98.

<sup>&</sup>lt;sup>4</sup> https://www.expandinglearning.org/expandingminds/article/strengthening-out-school-time-initiatives-support-student-success-role-united.

<sup>&</sup>lt;sup>8</sup> Maine Science Festival celebrates 10 years of hands-on STEAM learning. Saturday's science festival also hosted the Maine Invention Convention, highlighting hypotheses from Maine's brightest young minds. <a href="https://www.wabi.tv/2025/03/22/maine-science-festival-celebrates-10-years-hands-on-steam-learning/">https://www.wabi.tv/2025/03/22/maine-science-festival-celebrates-10-years-hands-on-steam-learning/</a>

<sup>&</sup>lt;sup>6</sup> How Are Museums Supported Financially in the U.S., U.S. State Department Report, 2016; Statistics Analysis Package – Survey of FY2019 + COVID-19 Survey + Looking Forward Survey, Association of Science & Technology Centers, 2019.

## MAINE **DISCOVERY** MUSEUM

Impact as measured by testimonials

Maine Discovery Museum, like most informal education institutions, has had to find creative ways to most accurately measure our impact. MDM has years of qualitative data from patrons, parents, educators, and community partners that have provided us near constant feedback and confirmation of our work. This feedback has been instrumental in guiding MDM's programs – both the expansion of current programs and creating new ones that serve our community. Given that much of our impact is best presented in narrative format, we've provided some examples that are representative of the full bank of data we have.

- Small rural communities from around the state do not have ready access to many STEAM related programs and MDM helps to fill that need in a stable and predictable way. Families and students cannot easily travel to places like Boston, but still deserve to have access to high quality educational STEAM programing for all ages. The importance of having organizations like MDM in the community and thriving cannot be overstated. MDM's educational work and programming fills a deep need for science instruction and understanding throughout the state. Alyson Saunders, Dexter Regional High School
- The kids look forward to this week every year. It's really high-level science but you guys teach it in such a fun, all hands-on way! Our community can't thank you enough for this opportunity for our students to do real world science! Ashley McCaslin, Tremont Consolidated School
- There are some world-changing projects being built in Maine and it's important that the state is aware of them. The MSF is an important avenue for this advocacy and creates opportunities for researchers, educators, and entrepreneurs to meet each other which could foster impactful relationships for the future of our state and beyond. *Brian Harris*, CEO, MedRhythms
- Our partnership with the Maine Discovery Museum has benefitted the library by bringing more STEM programs to the community through direct outreach by museum staff and through program support provided to library staff. Additionally, the museum's generosity in providing the library with a family pass that patrons can check out has been extremely popular. Patron use of the pass continues to rise, with an average of 25 children and caregivers visiting the museum each month. The most notable increase has been in teen engagement, with the Mission2Mars Moon Escape Room having the highest attendance of any teen program in the last three years. *Michele Brosseau*, *Bangor Public Library*
- Our students can't stop talking about the Exploding Diapers and Ice Cold Science workshops. Thank you
  for bringing science enrichment to the grades that don't have science as part of their regular curriculum.
  It's so important to encourage and maintain the children's natural excitement about science. We can't
  wait to have you back! Kristina Dumont, Principal, Bradford Elementary School
- ...what you do is one of the best things for kids to go through. Not only are you educating young kids to understand engineering, but you are preparing them to think for themselves in problem-solving and you and your team need to be recognized for this as I am doing now. Thank you and your team for your work and keep creating great minds that will be doubly beneficial to all of us, as we will need them as we get older. Ron Canarr, United Technologies Center
- The Invention Convention is really great because it is teaching everyone that is involved how big your opportunities are. It really encourages them to make a difference, try something new, fail at it and try again. Parent of a Maine and National Invention Convention competition winner
- The MSF is bringing all sorts of science to Mainers who would not have access otherwise. It's important to raise awareness of the world-class work going on here and to let people know about science that should be better understood. Having that work being done in Maine at the MSF is excellent outreach and informal education. John Thompson, Physics Professor & Chair, University of Maine; Fellow of the American Physical Society.

- The MSF is an amazing celebration of all aspects of science and fosters a connection to science for people from an amazing variety of backgrounds. Individuals who may not have formerly seen themselves as 'interested' in science or even identified as 'scientists' walk away from MSF inspired to pursue new passions, ask new questions, and communicate the value of science as practitioners themselves. Jennifer Page, Hurricane Island Center for Science and Leadership
- The math enrichment MDM is running as part of our After School program is fantastic! The children's attitudes about math have changed so much! They now see that math can be fun and something relevant and important for their own lives. This is something we just can't get with traditional classroom instructions. Kara Soule, Program Director, 21 Century Community Learning Center, Fairmount School
- This program is the only one highlighting STEM careers! It's amazing to see kids realizing what options they might have for their future careers! Youth Development Coordinator, Maine Seacoast Mission
- Enriching and inspiring the next generation of student scientists is an important part of the annual Maine Science Festival. Who knows? Dr. Marnik's presentation could be what sets a young person on a career path toward someday developing a vaccine that cures cancer, Alzheimer's, or Parkinson's disease. When we plant the seeds of inspiration, nurture the curiosity of young people, and help that curiosity flourish with STEM education, our society reaps the benefits of their success. Marie Hansen, Dean of the College of Science and Humanities, Husson University
- The MSF provides a family-friendly, approachable atmosphere for the public to learn about our work in animal health and to ask questions about iconic creatures like moose. It's also a 2-way street; people often have intriguing narratives about wildlife or livestock in Maine that help inform us about emerging issues or educational outreach needs. Anne Lichtenwalner, Veterinarian/Animal Science Professor, University of Maine

programs of

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