

## Statewide Science, Education, and Equity Initiative

The Arts and Cultural Heritage Fund of the Legacy Amendment provides critical support for the Science Museum of Minnesota to develop world-class programming and grow our capacity to serve as a statewide leader and resource in STEM education. The COVID-19 pandemic impacted our schools, communities, and families in ways that challenged us as an organization to learn, adapt, and innovate to meet the constantly changing needs of our audiences.

And that impact continues. In 2022, for the first time since National Assessment of Educational Progress (NAEP) tests began tracking student achievement in the 1970s, 9-year-old students lost ground in math, and scores in reading fell by the largest margin in more than 30 years (New York Times, September 1, 2022). At the same time, profound long-standing educational disparities persist and widen across racial, ethnic, and socio-economic groups. These disparities are keeping young minds from the most important conversations in STEM.

Guided by the Science Museum's newly adopted *2030 Strategic Plan*, the museum remains committed to working with **schools, communities, and families throughout Minnesota** to engage learners of all ages in experiences that foster a positive STEM identity — where more people see themselves in STEM — centering equity in both science and education. With your support, we can build our state's STEM learning pathways and prepare all Minnesotans for success.

### What we accomplished in FY 2022-2023:

The 2022-2023 Statewide School and Community Initiative, funded by the Arts and Cultural Heritage Fund, was instrumental in helping the museum recognize and respond to barriers to STEM learning and engagement that amplify systemic inequities already present in our communities. In 2022-23, the museum:

- Invested in infrastructure to better understand our school audience needs and reach by integrating Minnesota Department of Education (MDE) data with our own school audience data.
- **Engaged in a new collections access and education initiative that included community listening sessions, the development of new culturally reflective engineering kits, and implementation of a pilot community curator program.**
- **Completed a new online collections portal, making significant portions of our Minnesota cultural collections available to audiences across the state and the world.**
- Continued to serve a statewide audience of students and educators through virtual and in-person programs.



## FY 2024-2025 - Helping Audiences Access Science Museum Resources:

With proposed FY 24-25 Legacy funding, the Science Museum of Minnesota will build upon past Legacy-funded efforts to deliver on our mission of science and education centered in equity — making science, arts, and culture more accessible to the people of Minnesota. We will serve the changing needs of audiences, amplify and expand access to our research and collections, develop the next generation of digital and in-person programs for family groups and schools, and build the capacity of schools and communities to address equity and access in STEM participation.

- *Continue to invest in understanding and responding to the STEM learning needs of families, communities, and schools in all 87 Minnesota counties, providing specific attention to schools and communities most impacted by COVID-19. Continued investment in this community-first approach to engagement will support the museum's efforts to increase participation of BIPOC students, English Language Learners, and students receiving free and reduced lunch, while also developing and strengthening relationships with the eleven tribal communities within Minnesota. Our focus is on providing interesting and relevant content, broadly available and specifically delivered to particular groups, that supports lifelong engagement with STEM. The museum believes that this work to create culturally specific and accessible learning experiences will engage young learners and foster positive STEM identity - a critical component to future STEM participation.*



- *Amplify the connection of science and culture through the museum's research, collections, and collaborations.* The Science Museum's collection of more than two million objects — a powerful storehouse of meaningful information — represents a broad diversity of cultures and spans Earth's history. Through community listening sessions and program evaluation data gathered over the last biennium, we identified four areas for action related to collections access and education:

- Improving communication about this work,
- Addressing barriers to access to the collections,
- Committing to more inclusive and culturally sustaining processes, and
- Identifying mutual goals with community members for future work.

Our work across FY24-25 will address these action items via two initiatives. The first, which builds on previous Legacy-funded work, will add important details and contextual information about the museum's Dakota and Ojibwe collections, directly from people whose ancestors made the objects.

The second initiative will use an interdisciplinary mix of collections documentation, field research, and community outreach, to examine the Ice Age and the post-Ice Age world in Minnesota through assembling, investigating, and sharing the records of paleontology, archaeology, climate science, and oral traditions. Both of these initiatives will examine the effects of change over time, adding information to, and expanding digitization of our collection while serving as a resource for museum program development. Each initiative will use our community-first approach to guide their direction and engage people in our work.

- *Develop and deliver educational programs to equitably meet the needs of Minnesota’s families, communities, and schools.* We have developed and improved our program models, ranging from new student self-guided modules for use at home or school, on-line presentations, and hands-on kits, to favorites including school field trips, outreach programs, and family events. These programs create an opportunity for the Science Museum to reach schools and communities throughout Minnesota that have traditionally not participated in museum programs. All of these innovative, accessible, and culturally-relevant STEM education programs are centered in equity.

A focus will be placed on the continued development of learning experiences that feature the museum’s extensive cultural collections through a collaborative process involving museum science staff, educators, and community partners. In addition, the museum’s IDEAL Center (Inclusion, Diversity, Equity, Access, and Leadership) will conduct intensive institutes for teachers and district leaders to help them explore equity and inclusion, integrating museum collections and exhibits to address systems of oppression and educational inequities.

### Impact

Science and education that center equity are at the heart of the Science Museum of Minnesota’s mission! Arts and Cultural Heritage funding in the FY24-25 biennium will power the museum’s ability to serve all 87 Minnesota counties — particularly communities that are traditionally underrepresented in STEM learning opportunities and careers. Legacy funds will continue to support the Science Museum’s work to preserve the arts and cultural heritage reflected in our scientific research and collections and deliver innovative learning experiences that meet the changing needs of Minnesota’s schools, families, and communities.

With your public investment, the museum will more effectively support Minnesotans by successfully reaching our 2030 strategic goals to:

- Create inspiring, relevant digital and physical STEM learning experiences and programs that advance STEM success for students and educators across Minnesota
- Conduct and amplify scientific research, and steward and promote the scientific collection to contribute to the broader body of knowledge
- Inform and activate the public about important issues facing people, communities and the planet

*It is therefore with gratitude and great appreciation that the Science Museum of Minnesota asks for your support of its FY24-25 Arts and Cultural Heritage appropriation request of **\$1,739,381**.* The Science Museum recognizes and embraces the important role it plays in providing unique informal STEM education experiences within our state’s educational ecosystem. As Minnesota students face a critical juncture in their recovery from pandemic learning loss, now is the time to invest. With your support, we truly can inspire learning, inform policy, and improve lives!

