

Senate Finance Committee Testimony Tracey Tomme, President & CEO Boonshoft Museum of Discovery Curator of Ohio Institute of Informal Science Education May 16, 2023

Chair Dolan, Vice Chair Cirino, Ranking Member Sykes, and members of the Senate Finance Committee, thank you for the opportunity to present testimony in support of funding for the Ohio Institute for Informal Science Education. I am Tracey Tomme, President & CEO of the Boonshoft Museum of Discovery located in Dayton, Ohio which, in partnership with our collaborating museums, curates the Institute.

The **Boonshoft Museum of Discovery** is the premier regional provider of interactive science learning experiences, which enrich the lives of children and adults; enhance the quality of life in our community; and promote a broad understanding of the world. In fulfillment of its mission, the museum **reaches approximately 220,000 children and adults annually** and **serves approximately 47,000 students** through school groups on field trips.

Boonshoft is unique in that it is a **natural history museum, science center, children's museum, planetarium, observatory, and zoo** all in one. The Boonshoft's most important assets – outstanding educators, extensive collection of artifacts and the exhibits - present the opportunity to support Ohio students beyond the walls of the museum. Because of this extensive network of educators and diverse offerings, Boonshoft was the perfect museum to curate the Institute.

Even pre-COVID, Ohio's education system needed more quality blended learning science education opportunities. Districts and charter schools with tight budgets often are not able to provide diverse science education to students, and home school families must work to find quality learning experiences that meet Ohio standards. To meet this need, we have been providing high quality blended learning opportunities since 2010.

When so many schools were switched to distance or hybrid learning during COVID, we saw an even larger need arise to fill the science gap. To address this, the Ohio Institute of Informal Science Education was developed in the last budget and is curated by the Boonshoft to provide advanced high quality STEM education curriculum to schools and students across Ohio.

The project began with a Pilot Program focused on Aerospace curriculum in collaboration with The National Museum for the U.S. Air Force and Wright Patterson Air Force Base. Materials for the programs are sent directly to schools or families and supplemental curriculum is provided for students in kindergarten through high school. The beauty of this program is that it is hands on despite being remote. Students work on a project alongside the educator by using the materials sent to their school or home. As one teacher commented, "I found the website pretty easy to navigate. I found the format, time, etc. at the bottom of the museum offerings very helpful. I booked two different programs this week to try out. We booked through Boonshoft and through Armstrong. Both were super receptive and easy to work with. Lessons were engaging, hands on, and overall went very well! Having materials in advance and discussing the process with the presenter on a test call made everything ready when kids came in which saved me time and made the lessons go more smoothly. I look forward to continuing to work with the Boonshoft and the other museums."

To share an example of the impact of this program, Dr. Myrrha P. Satow, Founder/President Performance Academies, said in the 2022 spring testing, their students' overall proficiency rates on the **<u>8th Grade Science OST increased 8 points</u>**. Several campuses had significant increases in that time, usually **<u>more than doubling their 2021</u>** pandemic year performance – advancing learning recovery.

The only difference was their partnership with OIISE.

"The resources, instruction, and lessons aligned with State Science Standards that the Boonshoft team brought to our schools this year was a game changer. I can't thank the folks at the Boonshoft enough for their support and commitment to our schools, as well as our amazing team of Science teachers who so willingly and brilliantly co-taught and collaborated with them and provided the awesome day to day instruction that facilitated the loft in these scores," she said.

Performance Academies are located on 12 campuses all across Ohio.

Following their successful Pilot Program, the Institute now wants to expand its partnerships with participating museums across Ohio to develop more curriculum in the biology space as well as increase its footprint to a larger portion of the state.

This allows Ohio's science and natural history museums to promote and leverage fixed assets within our state to provide unique, high-quality opportunities to students and educators. Eligible partners include brick and mortar museums and science centers in Ohio, many of which have already expressed their interest in participating in the Institute.

By increasing the program offerings and footprint of the program, **an additional 19,200 students in Ohio** would have the opportunity to participate in course offerings. Course offerings would increase by at least ten standards-based, peer-reviewed programs.

Examples include:

Honeybees a-Buzzin'

Grades PreK - K

What are insects, and why are they so important? Learn about insects through active investigation and discuss their characteristics and life cycle. This program will explore the domain of the marvelous honeybee to illustrate their value to our world.

Food, Fitness, & Fun

Grades $1^{st} - 8^{th}$

Get your students moving! Learn about how we fuel our bodies and how to keep our bodies fit. This fun program introduces nutrition and activities with the goal of developing good habits for a healthy body.

Meet the Animals

Grades K-12th

Get up-close and personal with the Boonshoft Museum of Discovery's animal ambassadors. Learn about their habitats and behaviors during this fascinating conservation-based presentation.

To support our work, the Ohio Institute of Informal Science Education respectfully requests \$600,000 each in Fiscal Years '24 and '25 in operating budget appropriations to expand the program offerings and statewide footprint of the program.

Thank you again for the opportunity to testify today on this important project. I would be happy to answer any questions.