

Inspire! Grants for Small Museums

Sample Application IGSM-251693-OMS-22 Project Category: Lifelong Learning

Muncie Children's Museum

| Amount awarded by IMLS: | \$50,000 |
|-------------------------|-----------|
| Amount of cost share: | \$150,000 |

Muncie Children's Museum will fabricate and install the White River Water Table exhibit to provide a learning environment in which children ages 10 and under can practice the skills of collaboration, communication, critical thinking, and problem-solving. The museum will work with an exhibit design firm to craft the new exhibit component based on recent concept development and schematic design planning. This project will support the efforts of East Central Indiana—a 9 county regional coalition-- to create a culture of education that provides residents with an educational attainment level to be successful in school and the workplace. The museum will partner with other community organizations involved in this effort to develop a framework of evaluation to capture measurable outcomes that are important to guiding future educational planning.

Attached are the following components excerpted from the original application.

- Narrative
- Schedule of Completion
- Performance Measurement Plan

When preparing an application for the next deadline, be sure to follow the instructions in the current Notice of Funding Opportunity for the grant program and project category to which you are applying.

Muncie Children's Museum: Narrative

The Muncie Children's Museum (MCM) is requesting \$50,000 to help with building the *White River Water Table*. This is one component of a larger project to upgrade six exhibits as part of the *More to Explore Capital Campaign*.

Project Justification

Which Inspire! goal will MCM's project align?

This project will align with the Inspire's Lifelong Learning goal to empower people of all ages and backgrounds through experiential and cross disciplinary learning and discovery.

How will your project advance your institution's strategic plan?

For forty-four years, MCM has been an important informal learning center with the *mission to provide fun through educational and interactive opportunities for children of all ages in a safe and creative environment*. An underlining precept of the strategic plan is that it must be adaptable to the ever-changing external environment which includes unemployment and underemployment, changing family structure, and shifting school demands. This project advances the strategic plan framework by

- Conducting community focus groups and visitor surveys to understand the current expectations and needs of children, families, community stakeholders, and schools.
- Upgrading exhibits that will be braided into the community efforts to create a culture of education in East Central Indiana.
- Collaborating closely with Muncie Community Schools to make sure upgrades align with its Innovation Plan.

What need, problem, or challenge will your project address?

The *More to Explore* exhibit upgrades including the *White River Water Table* will support East Central Indiana's efforts to create a culture of education that provides residents with an educational attainment level to be successful in school and the workplace, thus accessing high paying jobs. According to a 2019 Brookings Institute report, Indiana has been adding jobs quicker than other Midwest peer states. Unfortunately, most of the job growth is with low wage jobs.¹ In Delaware County, 48% of families are either in poverty or considered low income.² In Muncie Community Schools, an average of 80% of students receive free or reduced lunch.³

Over the past decade business, economic, and public leaders have striven to transition East Central Indiana's rust belt manufacturing landscape to more advanced based industries. As new industries moved in and others upgraded, a gap appeared that showed East Central Indiana was lacking in the number of high tech skilled workers needed for advanced industries. Over 50% of the region's labor force has a high school diploma or less. In Muncie, over 27,000 residents have no postsecondary education.⁴

Regional leaders quickly realized that schools, nonprofits, foundations, businesses, and government needed to mobilize to create a culture of education. Together they could work collectively to raise the educational attainment of residents. MCM is considered one of the community assets that can help residents reach that goal. (Letter of Support from the George & Frances Ball Foundation are attached.)

¹ Brookings Institute, Indiana's Bellwether Economy: Promoting Quality Work in an Age of Disruption, 2019.

² United Way ALICE Project, ALICE in Delaware County 2016 Point-in-Time Data, 2016.

³ Indiana Department of Education Compass, *Muncie Community Schools*, 2017-18.

⁴ US Bureau of Labor Statistics and US Census Bureau, American Community Survey, 2017

Who is the target group for the project and how have they been involved in the planning? All *More to Explore* exhibit upgrades including the *White River Water Table* will be geared to children ten and younger. Visitor surveys and focus group discussions in 2018 and 2019 guided the prioritization for upgrades to exhibits. They pointed to the importance of upgrading the current water table because children love spending time there but are often frustrated due to the breakdowns. These surveys and discussions continue to direct the development of exhibits and programs toward nature and STEM which have continually been the subjects rated the highest by visitors since 2008.

Through visitor surveys of both families and schools as well as focus groups with 1st and 2nd graders, MCM knows children have innate interest in nature. Much of preschool and early elementary curriculum is centered around the natural world and what can be seen in backyards and school yards, as well as parks. Educators have told MCM that it is important that exhibits share knowledge and teach skills that not only compliment classroom learning but that a child can use to understand where they live. The new water table will do just that.

Local elementary school and pre-school educators are now more intentionally part of all focus groups and visitor surveys. Muncie Community Schools (MCS), the largest school system in East Central Indiana, recently completed its Academic Innovation Plan in 2020, The plan recognizes that for students to succeed, MCS must collaborate with informal educational partners in the community, such as MCM. MCS's Director of Special Education and High Ability Students is an active MCM board member. Both MCS Superintendent and Associate Superintendent have met with MCM and one of MCS's curriculum developers is part of the MCM's exhibit team. (A Letter of Support from MCS is attached.)

Who are the ultimate beneficiaries of the project ?

The main beneficiaries are children, ten and under, and schools. Children arrive in the world curious and ready to learn, MCM provides a family friendly, safe, and fun environment for children to begin to build knowledge and practice skills through play. The new water table will be maintained so it can be in place for ten to fifteen years.

In 2019, MCM served 42,117 visitors, the largest number of visitors in eighteen years. 41% of visitors came from Muncie and 9% from other Delaware county communities. The majority of remaining visitors come from counties within a ninety mile radius of Muncie.

Whether with its school tours or general admission visitors, MCM has kept admission low for over ten years knowing that many families in the region need assistance. Free Saturdays are offered once a month with free admission and special programming so children from all socio-economic backgrounds can make discoveries at MCM. Over 77,500 visitors have taken part in Free Saturdays since it began in 2006 with 25% coming from the low income neighborhoods of Muncie. In 2019 alone, *Free Saturday* averaged 584 monthly visitors.

Of the total visitors for 2019, 4,713 visited as part of group field trips. 38% of field trips came from Delaware County with a majority of the remainder from East Central Indiana. 30% of field trip classes were preschool, 22% kindergarten, and 12% special education. Another 22% of field trip were various summer camps, churches, and other youth groups. The remainder was 1st through 3rd grade classes.

Slowly over the last five years, MCM saw a decrease in school field trips which generally brought in 7,000 to 8,000 school children annually. Collaborating more intentionally with school educators and making sure exhibit upgrades align with school curriculum, MCM hopes to see theses numbers increase once the fears caused by COVID abate.

How will your project address the goals of the Museums for America program?

This is a lifelong learning project because it will provide high-quality inclusive educational opportunities that address East Central Indiana's goal to increase the educational attainment of its children. These IMLS funds will help fabricate the interactive *White River Water Table* for children ten and under. The water table will provide children the knowledge about a regional waterway at the same time its teaching the skills of collaboration, communication, critical thinking, and problem solving.

MCM's goal is to continue, expand, and better align what it has been doing since 1977 with the goals of community schools and business leaders while making sure visitor suggestions and needs are also being met. MCM is working with regional leaders to identify early learning and community resources available to make our children succeed. In a 2013 publication, IMLS called *upon policy makers and practitioners to fully use the capacity of libraries and museums to close knowledge and opportunity gaps and give all children a strong start in learning. Libraries and museums can play a significant role in early learning for all children. As our nation commits to early learning as a national priority essential to our economic and civic future, it is time to become more intentional about engaging these vital community resources.⁵*

Project Work Plan

What specific activities will you carry out and in what sequence?

MCM completed overall general master exhibit planning in 2019 with museum visitors, staff, and stakeholders. The plan identified six exhibit components that will be upgraded as part of a *More to Explore* Capital Campaign including the water table.

The current water table is about fifteen years old with some of the interactives not working as precisely as designed due to calcium build up and weakened water pressure. A better water filtration and more robust pumping system will be part of the new water table. Due to the popularity of the water table, the new one will be almost double in size and offering more interactive opportunities.

Water table interactives will show how the river powered early mills, provides drinking water for today's homes, and affects the local ecosystem. Various opportunities will let children experiment in ways to control the rivers flow, the concepts of sink and float, and how to build a boat that will successfully navigate the river. (Please see concept drawings for the water table attached as a supporting document.)

As IMLS funds will be available in September 2022 much of the planning for the water table will be completed including final decisions on interactives, content development, and schematic drawings. MCM hopes to be moving into fabrication on the water table in the fall of 2022 with installation sometime in the summer of 2023.

What are the risks to the project and how will you mitigate them?

Since the upgrade to the water table is dependent on a successful outcome of the capital campaign, an inherent risk exists if the campaign should not be successful. However, this diminishes as the campaign is about to reach \$2 million before the end of 2021. These exhibits are the priority of the campaign and will be funded and implemented first before other capital campaign projects including revamping the rest rooms, multipurpose rooms, and other public spaces. MCM will be able to spread out the timeline of upgrades if more time is needed to raise funds.

Probably the biggest risk is supply chain disruptions for the materials and potential rising costs to fabricate the water table. MCM would love for the new water table to open in 2023 but this can be easily extended if needed. If cuts to projects that the campaign is funding needs to be made because of rising

⁵Institute Museum and Library Services, Growing Young Minds: How Museums and Libraries Create Lifelong Learners, 2013

costs, exhibit upgrades will NOT be the projects cut. MCM staff is ready to keep fundraising and writing grants to get all campaign projects funded.

Who will plan, implement, and manage your project?

MCM has a small staff with the leadership team consisting of the Executive Director, Director of Exhibits and Education, Director of Development, and Grants & Special Projects. The leadership team will work closely with Kraemer Design & Production and Experience Science to plan, implement, and manage the *More to Explore* exhibit upgrades.

What time, financial, personnel, and other resources will you need to carry out the activities?

The \$50,000 in IMLS funds requested in this application will be braided with capital campaign funds to fabricate the *White River Water Table*. The total cost for the water table will be \$250,000.

Due to MCM's small staff, Kraemer Design & Production and Experience Science will be hired. MCM has worked with them on past exhibit projects and they both have extensive experience working with children's museums. (Please see Letter of Commitment in attachments.) Together, MCM's leadership team, Kraemer, and Experience Science will interview and select the fabricators, printers, general contractors, electricians, and plumbers, needed to carry out the project.

Steve Jones and Tom Kraemer will be overall project managers and the point of contact for all subcontractors. MCM Director of Exhibits and Education and Grants & Special Projects staff person will work together to keep MCM's decision-making moving forward throughout the process. Karol Bartlett, Experience Science, will guarantee that interactives and labels are designed and fabricated appropriately for the targeted age group.

Fabrication of the water table will be done off site and then brought to MCM to be installed. A local construction firm will tear out the current water table, install the new water filtration system, and prepare the space for installation by the water table fabricators. MCM is planning for onsite preparation and installation to take four to six weeks.

How will you track your progress toward achieving your intended results?

The RFP for water table fabrication and installation will include the milestones and timeline used to track progress. MCM's leadership team will monitor progress through both weekly project and numerous onsite meetings with Kraemer and Experience Science, as well as the fabricator and local construction supervisors.

Project Results

What are your project's intended results and how will they address the need, problem, or challenge?

The intended result of this project is to fabricate and install the *White River Water Table* to provide a learning environment in which children ten and under can practice the skills of collaboration, communication, critical thinking, and problem solving. MCM plays an important part in getting kids ready for kindergarten and succeeding in 3rd grade reading. All these developmental markers are needed, so as they grow, they will reach an educational attainment that will lead to workplace success. This supports East Central Indiana's efforts to create a culture of education.

This newly built and expanded interactive water table will provide children the knowledge to understand how the White River is important to them and East Central Indiana. The western fork of this river runs 312 miles and starts in East Central Indiana, winds through Muncie, and flows south to eventually dump into the Wabash River in southern Illinois. A tributary of the White River was dammed just outside of Muncie in 1959. Today Prairie Creek Reservoir has 1,275 acre lake with 750 acres of land and provides not only water to the area but also recreation to thousands of visitors each year.

Through the water table, children will gain knowledge about the White River as they practice the skills of collaboration, communication, problem solving and critical thinking. A 2018 American Academy of Pediatrics report stated, "*Play is fundamentally important for learning 21st century skills, such as problem-solving, collaboration, and creativity, which require the executive functioning skills critical for adult success.*"⁶ These skills are considered transportable and important in every school subject as well as across industries.

The water table lends itself well to having children collaborate and communicate to build a dam to change water flow. Problem solving skills will be honed as children decide which pieces to use to build a boat that navigates effectively. Critical thinking will help children examine the water processing interactives that show how water is filtered to be used in their homes.

How will the knowledge, skills, behaviors, and/or attitudes of the audience change?

MCM understands its *More to Explore* exhibit upgrades are part of a collective effort with businesses, schools, nonprofits, foundations, and community leaders to help the region's residents succeed in the workplace. MCM is doing its part by reaching and preparing the youngest residents for success in school. That success lays the groundwork for a post-secondary certificate, training, or degree that will get them a job that will give them a quality of life that can be felt for generations.

What products will result from your project?

The immediate product of this project will be the actual interactive *White River Water Table* which will be handicap accessible and designed for children ten and under. A longer term product will be the creation of a culture of education in the region that helps residents succeed in both school and the workforce.

MCM will be working with other organizations involved in this effort to develop a framework of evaluation to capture data points and measure outcomes. What and how that looks like is unknown at the writing of this application. The George and Frances Ball Foundation, who is spearheading efforts, has just finalized a cradle to career framework with educational milestones and is now trying to develop processes that can measure success as well as areas of improvement. MCM plans to align its evaluations with this framework and process. The information gathered will be an important product to guide future regional educational planning.

How will you sustain the benefit(s) of your projects?

Part of the *More to Explore Capital Campaign* is to raise an additional \$500,000 to add to MCM's \$1.9 million endowment. These funds help maintain exhibits and cover other operational expenses. MCM has forty-four successful years in operation as well as experience meeting the needs of its visitors and community, the *White River Water Table* will become part of that success for years to come.

⁶ American Academy of Pediatrics, "The Power of Play: A Pediatric Role in Enhancing Development in Young Children," 2018, p. 2.

More to Explore: White River Water Table

| Schedule of Completion | | YEAR ONE | | | | | | YEAR TWO | | | | | | | | | |
|------------------------------------|-------|----------|------|------|------|------|------|----------|-----|------|------|------|--|-------|------|------|---|
| September 2022 - December 2023 | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | | Sept. | Oct. | Nov. | |
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| Fabricate water table | | | | | | | | | | | | | | | | | |
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| Prepare site & install water table | | | | | | | | | | | | | | | | | Ī |
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The schedule of completion reflects the two activities that the IMLS funds of \$50,000 will help support. The time frame allotted for both activities reflect the window of time that is being set aside for these activities given current supply chain interruptions. Kraemer Design & Production suggested a wider built in time frame given what they are seeing with current fabrication timelines. In normal circumstances fabrication would take about 3 months. Site preparation and installation about 4-6 weeks.

Applicant Name: Muncie Children's Museum

Project Title: More to Explore: The White River Water Table

| Performance Measure | Data We Will Collect (e.g., counts, costs, weights, volumes, temperatures, percentages, hours, observations, opinions, feelings) | Source of Our Data (e.g., members of the target group, project staff, stakeholders, internal/ external documents, recording devices, databases) | Method We Will Use (e.g., survey, questionnaire, interview, focus group, informal discussion, observation, assessment, document analysis) | Schedule (e.g., daily, weekly, monthly, quarterly, annually, beginning/end) | | | |
|---|---|--|--|--|--|--|--|
| Effectiveness: The extent to which activities contribute to achieving the intended results | MCM's leadership team will monitor effectiveness through weekly project meetings with Kraemer, Experience Science, and the fabricator. These meetings will refer to the milestones listed in the RFP to track progress. | | | | | | |
| Efficiency: How well resources (e.g., funds, expertise, time) are used and costs are minimized while generating maximum value for the target group | Before fabrication and installation begins, a project budget will be developed and approved by MCM, Kraemer, Experience Science, and the fabricator. Every two weeks, the MCM leadership team will meet to evaluate spending on the project compared to approved budget. | | | | | | |
| Quality: How well the activities meet the requirements and expectations of the target group | A timeline for final reviews of fabricated components will be established before fabrication begins and approved by MCM, Kraemer, Experience Science, and the fabricator. Fabricator will gather MCM, Kraemer, and Experience Science as needed when final reviews are ready. These reviews will make sure that learning goals of interactive components are being maintained during fabrication process. | | | | | | |

| Timeliness: The extent to which each task/activity is completed within the proposed timeframe | MCM's leadership team will monitor timeliness through weekly project meetings with Kraemer, Experience Science, and the fabricator. These meetings will refer to the timetable listed in the RFP to track progress. |
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