Grants for STEM Activities Outreach During COVID-19

Bisbee Science Exploration and Research Center
Bisbee, Arizona

The science center has transitioned its "Science Fridays" interactive engagement programming to be delivered online, is hosting live classes via Zoom for students in Cochise County and beyond, and is collaborating with the nonprofit Naco Wellness Initiative and Arizona State University to offer resources in form of Science Friday videos, activities, and curriculum to students and educators who don't have access to internet.

Contact: Etta Kralovec, Board President, bisbeesciencelab@gmail.com

Burpee Museum of Natural History
Rockford, Illinois

Despite its closure, the museum continues teaching via live feeds in the paleo prep lab, live animal interactions, virtual paleo digs, and more—inspiring STEM discovery. It launched its first online programming upon closure, and the response was more than 90,000 views in just a few days. Responding to community need, the museum us create electronic resources to fill that need. We will leverage excitement through the "Burpee Without Walls" program, which includes offering free STEM-at-home activities, learning videos, live feeds, and opportunities to share and interact; online presentations for school classrooms; and online, interactive forum classes to further learning in a collaborative way.

Contact: Rhonda Dailing, Director of Finance & Operations, rhonda.dailing@burpee.org

Cade Museum for Creativity and Invention
Gainesville, Florida

Upon closing, museum staff immediately began developing digital STEM lessons and activities, and they have been disseminating two STEM video presentations per week for all ages through content partnerships with the Alachua School Board and PBS Kids.

Contact: Sue Draddy, Director of Marketing, sdraddy@cademuseum.org

Children's Museum Tucson
Tucson, Arizona

The museum is replacing its planned STEM summer camp programs and on-site "Roll Out Science" and "Brain Boost" programs with virtual STEM activities and STEM Camp Kits. These are being designed to emphasize accessible, interactive science activities for elementary and middle school-age children with supplementary kits to support families at home during the pandemic. The museum's educators are developing free online STEM experiments and activities created with common, everyday items available affordably at home (hand soap, water, paper, etc.). STEM Camp Kits will include activities, guides, and supplies to inspire experimentation.

Contact: Hilary Van Alsburg, Executive Director, hilary@childrensmuseumtucson.org

Columbia Memorial Space Center
Downey, California

After gauging the needs of its communities, staff at the science center are creating a suite of online synchronous and asynchronous programs, including: preK–12 curriculum units, professional development for classroom teachers and informal educators, demonstrations, virtual events, virtual field trips, and online day camps (with a supply delivery program). The institution also will launch interviews with STEM professionals in a "fireside chat format," specifically with its community of Apollo and Space Shuttle retirees, while also curating an online public forum to discuss the pandemic. These programs will be co-developed with community partners, including school districts, the Los Angeles County Office of Education, and Virgin Orbit.

https://www.columbiaspacescience.org/cmsc-online
https://cityofstem.org/stemathome

Contact: Sandra Valencia, Center Supervisor, svalencia@downeyspacecenter.org

Da Vinci Science Center

Allentown, Pennsylvania

Da Vinci Science Center is creating new ways for its audiences to continue their STEM explorations at home. Recently published webpages include our "Learn It, Try It, Share It!" Science at Home activities and scientifically accurate COVID-19 resources for families and teachers. In response to community requests for resources that can be sent home to make it easier for students without internet to participate, the science center is furnishing Grab-n-Go STEM Kits to schools. A virtual science fair will allow students whose events were cancelled to still share their work, and scientists will comment on their projects. Traditional summer day camps and outreach programs are being redesigned for online delivery, synchronously or asynchronously while still maintaining the science center's inquiry teaching style.

https://www.davincisciencecenter.org/science-at-home/
https://www.davincisciencecenter.org/covid-19-resources/

Contact: Karen Knecht, Director of Education, karen@davincisciencecenter.org

Discovery Center Museum

Rockford, Illinois

Educators at the museum quickly adapted curricula to multiple digital and home-based formats, including live streams on topics offering real time interaction with questions and answers, videos with instructions posted to website/social media with educators moving step-by-step through the experiments so children can follow at home, visually exciting science demonstrations for children, and STEM learning activity kits delivered each week in partnership with the local YMCA.

https://www.discoverycentermuseum.org/whats-happening/playfullearning

Contact: Lana Paris, Director of Development, lanap@discoverycentermuseum.org

Environmental Learning Center
Vero Beach, Florida

The ELC's programs have been centered around hands-on, feet-wet immersive activities that invite students to engage in STEM exploration through place-based learning focused on its estuary ecosystem, the Indian River Lagoon. Due to social distancing measures and the recent decision for the school district to remain closed throughout the school year, staff quickly adapted to provide hands-on, immersive activities using students' own backyards and neighborhoods as living laboratories. ELC now provides engagement opportunities through interactive videos offered through our website and social media—and will expand to include registration-based programming including Nature Near You kits that contain instructions and materials for home-based STEM activities

https://www.discoverelc.org/environmental-education-online-prog

Contact: Sara Piotter, Director of Education & Outreach, sarap@discoverelc.org

Eugene Science Center
Eugene, Oregon

Eugene Science Center is a small hands-on science museum and planetarium that will expand its capacity to provide online STEM engagement via interactive planetarium presentations, educational STEM video tutorials and demonstrations, and assistance to classroom teachers. The science center will develop hands-on activity kits that kids can explore from home, which will be distributed in the community.

Contact: Karyn Knecht, Education Director, kknecht@eugenesciencecenter.org

International Museum of Surgical Science
Chicago, Illinois

The museum is developing a STEM-engagement program that includes downloadable education materials and do-at-home activities, designed for grades 6–8. The packet and associated activities explore core concepts on topics including pathology, patent medicines, cardiology, ophthalmology, anesthesia and medical imaging. Each activity highlights artifacts from the museum, including a photograph and inquiries for observation. The project extends the museum's mission of enriching people's lives by enhancing their appreciation and understanding of the history, development and advances in surgery and related subjects in health and medicine. These resources will be made available digitally, and for local families in need, the museum will provide kits of materials.

Contact: Michelle Rinard, Operations Manager, michelle@imss.org

Knock Knock Children's Museum

Baton Rouge, Louisiana

Knock Knock will provide STEM-engagement programs during this time to the community through a virtual "Knock Knock at Your Door" program in addition to delivering STEM activity kits, with necessary materials, to 200 children's homes in at risk zip codes in Baton Rouge. Each week the "Knock Knock at Your Door" virtual series will highlight a STEM activity that can be done at home. These videos have the potential to reach more than 30,000 members of our community through all the museum's virtual outlets (Facebook, Instagram, website, text program). On Tuesday of each week 200 kits will be distributed to at risk homes that include the materials and directions for completing the STEM activity.

Contact: Kelli Harton, Development, kelli_harton@yahoo.com

Mid-Hudson Children's Museum

Poughkeepsie, New York

While museums and science centers around the country have been forced to close in response to the COVID-19 pandemic, the Mid-Hudson Children's Museum has found itself in a unique position among museums for having one of its core programs—its public farmers market—deemed an essential business. With public transportation to supermarkets shut down, schools closed and unable to provide free meals, and restaurants shuttered across the City of Poughkeepsie, access to food—especially for low-income households—just evaporated. MHCM is responding to the pandemic by planning an early opening to its 2020 farmers market season in order to connect city residents with fresh, healthy food at this time of urgent need. The market's weekly "Kids Kitchen" live cooking demonstrations will become virtual, and the museum will distribute recipe and nutrition information at the market.

https://mhcm.org/visit/poughkeepsie-waterfront-market/

Contact: Lara Litchfield-Kimber, Executive Director, llkimber@mhcm.org

Museum of the Earth at the Paleontological Research Institution

Ithaca, New York

Staff at the museum have quickly assembled a rich array of free, online educational resources focused on Earth and environmental sciences and will now, with funding, create resources that encourage people to get outside and make observations (while social distancing), and then share their observations. The museum also plans to expand programs that will reach people in their homes. Examples include virtual tours of local gorges, guidance on using smartphone apps, virtual field experiences, online museum programs (recorded and live), and planning for innovative programs when the museum reopens. To help households that lack computer or internet access, the museum has mailed packets of paper materials to a subset of its members who face these issues.

https://www.priweb.org/blog-post/learn-at-home

Contact: Ingrid Zabel, Climate Change Education Manager, zabel@priweb.org

Nauticus

Norfolk, Virginia

Since the onset of COVID-19, Nauticus has developed "Nauticus' Virtual Adventures," a series bringing its campus resources to the community, released daily on social media platforms and its website, and featuring behind-the-scenes tours, science lessons, a "Read, Watch, Act" series, live Q&As with staff and community leaders, and more. Activities included a virtual playgroup featuring "Peep Science," inspiring families to start a nature journal to share with Nauticus staff, and creating a deep-sea creature made of recycled materials and then sharing on social media to discuss what they've learned. It will now expand this series with a program called "Curious Kids' STEM-ulating Activities," which will focus primarily on ages 3–12 and include simple STEM challenges to be completed by children and families. It will include activity directions, supplemental worksheets, and video demos.

https://nauticus.org/virtual-adventures/
https://nauticus.org/read-watch-act/
https://nauticus.org/virtual-adventures-activities/

Contact: Elizabeth Clemens, Manager of Visitor Services, elizabeth.clemens@norfolk.gov

North Museum of Nature and Science

Lancaster, Pennsylvania

The team launched North Museum @ Home to offer parents at home newly created educational products from the museum, a trusted source for STEM educational resources. Every week, museum staff roll out new educational material within each its three North Museum @ Home programs: STEM Learning Activity Packs (providing engaging, hands-on educational experiences that help families learn more about a specific topic, in three age ranges), STEM Boxes (themed boxes filled with fun, age-appropriate goodies and activities), and Virtual Tours (educator presentations and downloadable guides). The museum will also launch the "Citizen's Science Project," a way to encourage sharing of the ways people collectively experience life through this time; after the stay-at-home order has been lifted, the museum will collect contributions and curate them into an exhibit.

https://northmuseum.org/north-museum-home/

Contact: Amanda (Mandy) Wee, Acting Director of Corporate Giving & Communications, grants@northmuseum.org

Ohio Valley Museum of Discovery

Athens, Ohio

The museum will leverage its extensive experience with maker-related workshops to develop and deliver virtual synchronous and asynchronous programming, hosting eight synchronous sessions of maker meetups, three technology-centered workshops via Zoom, a virtual Discovery Fair, and a #STEAMatHome social media campaign. The program will use materials families have at home and supplies to be delivered to participants. Paper resources will be included in each of the supply boxes and synchronous meetings will include a phone-in option to facilitate additional engagement access.

Contact: Jen Parsons, Executive Director, director@ovmod.org

Pensacola MESS Hall
Pensacola, Florida

The MESS Hall will engage its community in STEM programming through three routes: through virtual field trips led by MESS Hall educators in real time for classrooms, using household materials; through "mess kits" (modeled on the science center's in-house kits) that will be distributed at community centers and contain instructions and materials for doing science experiments at home; through the transition of the science center's "Science on the Street" program into a "Science in the Parks" program, creating signage for engaging activities in parks that require just the human body or common materials like dollar bills.

Contact: Megan Pratt, Executive Director, megan.pratt@pensacolamesshall.org

Sci-Port Discovery Center
Shreveport, Louisiana

Sci-Port and its community partners in the North Louisiana STEM Alliance will fulfill learning gaps in underserved communities by creating a STEM backpack loan program. Backpacks filled with hands-on STEM learning materials and instructions will be loaned out to underserved families. A set of four unique activities (60 units total) will be created, to serve 240 families. Families will register for the program, participate in an online video, and rate the program. Once complete, the family will return the backpack to receive the next of four in the series.

Contact: Heather Kleiner, Sponsored Programs Manager, hkleiner@sciport.org

Science Playspace Initiative
Mount Vernon, Illinois

The staff at SPI will develop "drive through" or "parking lot" STEM demos and distribute associated take-home activity packs for families and implement an "SPI at HOME" social-media campaign to allow families to connect and share their learning outcomes, with prizes for participating.

Contact: Stephanie Calondis Geiger, Executive Director, stephanie@spi-mountvernon.org

Turtle Bay Exploration Park

Redding, California

This museum/botanical garden/zoo has developed creative and effective ways to continue delivering STEM education by producing engaging video content that successfully delivers STEM engagement to home computers and devices. Called "Turtle Bay TV," it consists of weekly episodes highlighting topics hosted by staff from different parts of the operation. Topics include the interdisciplinary learning that is part of the organization's mission, such as science, engineering, animals, history, anthropology, horticulture, and more. The local PBS affiliate will air episodes. The episodes will start airing in early May! Staff are also creating live videos for social media that highlight and give an abridged version of regular educational programs that have been cancelled, such as "Science Saturday" (hands-on STEM learning) and "Little Explorers" (early childhood); these have write-ups, directions, and additional information for people to help people replicate the activity at home.

https://www.turtlebay.org/watch?wchannelid=wkjikqmexx

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