# Earth & Space Project-Based Professional Learning Community





# **April Concurrent Session C2 STORIES OF COMMUNITY COLLABORATION**

#### Welcome!

As we wait to get started with today's online session:

- Wave! Please turn on your camera if you can
- Rename your Zoom! Please rename your Zoom window with your name and organization
- Questions? Feel free to type any questions you have into the chat
- Recording? Portions of this meeting will be recorded

# Earth & Space Project-Based Professional Learning Community





#### STORIES OF COMMUNITY COLLABORATION

- Children's Museum of Virginia, Portsmouth, VA
- Museum of Arts & Sciences, Daytona Beach, FL
- The Children's Museum of Wilmington,
   Wilmington, NC

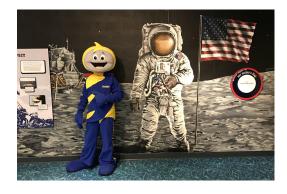
# VA, Portsmouth Portsmouth Museums - Children's Museum of Virginia

#### Andy Micciche & Christyne Matyseck

- Our initial proposal included two of our local libraries and would be a 6–8-week workshop session. Once we were accepted into the project, we found ourselves seeking a new partner who had guaranteed participants.
- Through a co-worker's connection, we talked to the Tidewater Youth Services Commission who recommended our community's boys home.
- We had to quickly adapt our activity plan to reflect the new audience.
- Instead of a continuing workshop we now turned each day into its own complete session.







## Children's Museum of Virginia

#### **Westhaven Boys Home**

- A residential group home for boys aged 12-17.
- Serves as both a post-dispositional/longer term treatment center and as a pre-dispositional detention alternative/emergency shelter for foster children or for teens in crisis.

#### Some Challenges:

- We were guaranteed participants, but not likely the same participants from week to week.
- Not knowing anything about our participants, or even how many would be with us each day, we attempted to prepare for it all. We had back up activities ready, we planned for a whole group together & how to split them in two groups if needed.
- We agreed we had to be open-minded & flexible. We also agreed that we would be accepting of whatever mindset the boys were in that day.







# Children's Museum of Virginia

#### **Project Activities:**



- Various Earth & Space related Planetarium Shows
- Earth & Space Kits: Mars Rover / Sort It Training Game / Pocket Solar System / Imagining Life / Design, Build, Test
- Coding with Ozobots
- Zoob building
- 3Doodler 3D pens
- Slime, Dry ice bubbles, Oobleck & Alka-Seltzer rockets







## Children's Museum of Virginia

#### Looking ahead...

- Community partnerships can seem overwhelming, but this project simplified the whole process and made it manageable for us.
- Incorporate exploring the museum into each session.
- Leave the museum exhibits on.
- For this project, we didn't want to stray from the Earth & Space topic but still acknowledged that the group may have other interests (painting, sculpture, etc.).
- Activities with an immediate result (*slime, dry ice*) were more popular than activities that involved a process or sequence (*ozobots*).
- We would do this again. Overall, we felt a sense of accomplishment in our first step to reach underserved audiences that are not our target age group for the museum.





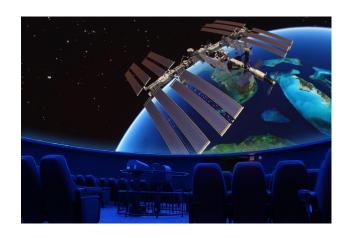


# FL, Daytona Beach Museum of Arts & Sciences



Seth Mayo, Christian Traverson

PROJECT DESCRIPTION: We are creating a collection of 3D printed hands-on models to support our planetarium shows, science nights, and special events. These new resources will provide a more accessible experience for tactile learners and the visually/hearing impaired.







#### **Museum of Arts & Sciences**

#### **Project Story**

- Originally planned to expand our MOAS Portable
   Planetarium program
- Examined how we could improve upon the A -Accessibility in DEIA
- Inspired by our experiences with the visually/hearing impaired
- Provide tactile learning to space and astronomy education







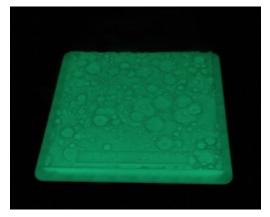
#### Museum of Arts & Sciences

#### The Project

- Purchased a professional grade 3D printer
- NASA 3D Resources (<u>https://nasa3d.arc.nasa.gov/models</u>)
- Smithsonian 3D Digitization (<a href="https://3d.si.edu">https://3d.si.edu</a>)
- Using TouchSee for 3D printed Braille (<a href="https://touchsee.me">https://touchsee.me</a>)
- Working with Embry-Riddle Aeronautical University
- Inviting local Blind and Deaf School for free shows
- Providing free models for student groups





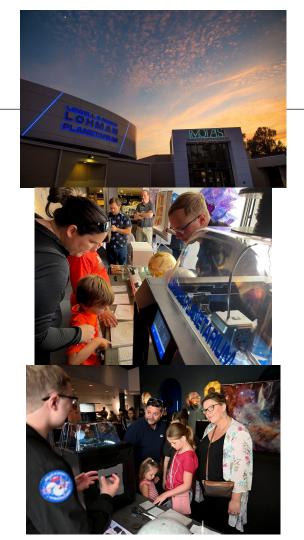


#### **Museum of Arts & Sciences**

#### What we have learned

- Reexamining our institution's application of DEIA
- Building upon our experience
- Advice from others from the learning community
- Inspired by other projects





# NC, Wilmington The Children's Museum of Wilmington



Julia Gerringer (she/her), Anna Harris

#### PROJECT DESCRIPTION:

Our project focuses on teaching earth and climate science to local underserved students in our community at the MLK Center. Students will participate in guided walks, science experiments, and other STEM activities. Guest presenters from within our community will be invited to speak to students on topics of earth and climate science.







# The Children's Museum of Wilmington

#### The MLK Center

- Partnership since 2020
- Outreach and grant-funded programs
- 20-25 students each session
- Ages 5-11
- Children from diverse backgrounds & education levels









## The Children's Museum of Wilmington

#### **Our Project: Challenges and Successes**

- Challenges:
  - Catering to various age groups
  - Developing educational and interactive activities that engage
  - Inclusivity & accessibility
- Successes
  - Cultivating a lasting partnership
  - Watching the children grow in their education and their comfort in working with their peers
  - Development of critical thinking skills
- Successful Activities:
  - Constellation Tubes
  - Hurricane Homes





### The Children's Museum of Wilmington

#### **POP & Cape Fear River Watch**

- POP (Plastic Ocean Project) attended in December
  - Plastics exploration project
  - Recycling and impacts on wildlife
- Cape Fear River Watch attended in March
  - Parts of a fish
  - Gyotaku
- These partnerships will continue at the Museum and in other capacities





### **Session Resources**

#### **Additional Resources**

- <u>Sustainability and Museums: A Workbook for Improving Operations, Engaging</u>
   <u>Communities, and Creating Partnerships</u>
- Museum & Community Partnerships: Collaboration Guide
- Working with STEM Experts: A Guide for Educators in Museums and Other
   Informal Learning Settings



# **Thank You**





