Earth & Space Project-Based Professional Learning Community

NISE NATIONAL INFORMAL STEM EDUCATION NETWORK

EXPLORE SCIENCE Earth&Space

April Concurrent Session B3
Collaborating with Libraries

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

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EXPLORE SCIENCE Earth & Space

Collaborating with Libraries

Session facilitator:

- Catherine McCarthy, Arizona State University, Tempe, AZ

Session presenters:

- Natalia Tooley, Cincinnati Observatory, Cincinnati OH
- Megan Pratt, Pensacola MESS Hall Pensacola, FL
- Ime Edokpayi, The Lawrence Hall of Science, Berkeley, CA
- Jake Murphy, Long Island Explorium, Port Jefferson, NY

Natalia Toole
Cincinnati Observatory
Cincinnati OH

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NORTHEAST REGION

OH, Cincinnati
Cincinnati Observatory

NAME(S): Natalia Tooley

PROJECT DESCRIPTION: We would like to reach rural families with elementary aged children who would otherwise not have as much access to space science programming by partnering with libraries in rural areas and offering free thematic programs.

Our Project

- We currently have 13 hour long programs scheduled with rural libraries.
- Each library is at least an hour outside of the city of Cincinnati.
- All of our programs are with the same two library systems: Highland County and Adams County, both of which are within the top 12 most economically disadvantaged counties in the state of Ohio (out of 88 counties).
- We also wanted to leave something with each library system that would have a lasting impact even after all of our program are over.

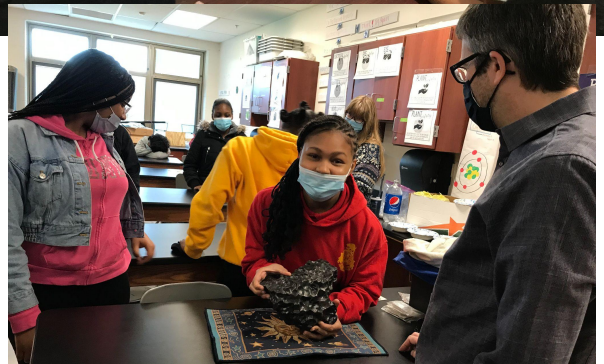
Comets and Meteors

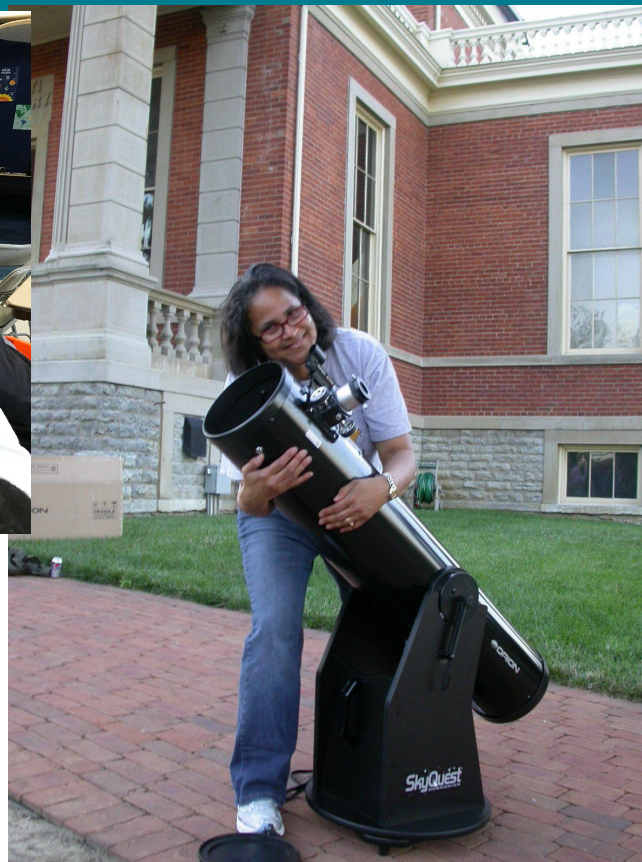
Rockets

Nebulas


SkyQuest
ORION

Lessons Learned





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SOUTHEAST REGION

FL, Pensacola
Pensacola MESS Hall

NAME(S): Megan Pratt, Sarabeth Gordon

PROJECT DESCRIPTION: We plan to partner with our local library systems to provide hands on earth science exhibits that will rotate through the 11 different library branches to reach from rural to inner city learners.

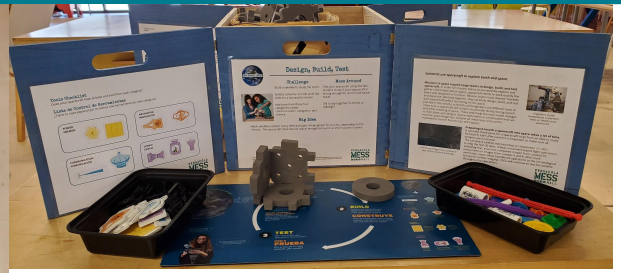
Earth Explorations Kits

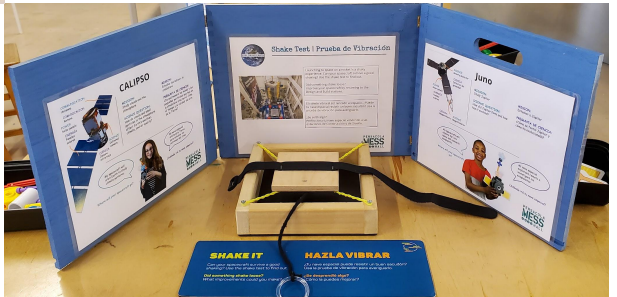
Pre-project planning

Had exhibits/activities in mind that we would provide.

Met with library folks who described space limitations as well as other tips on what works and what doesn't.

Redesigned plan to make tabletop boxes to fit multiple different libraries.

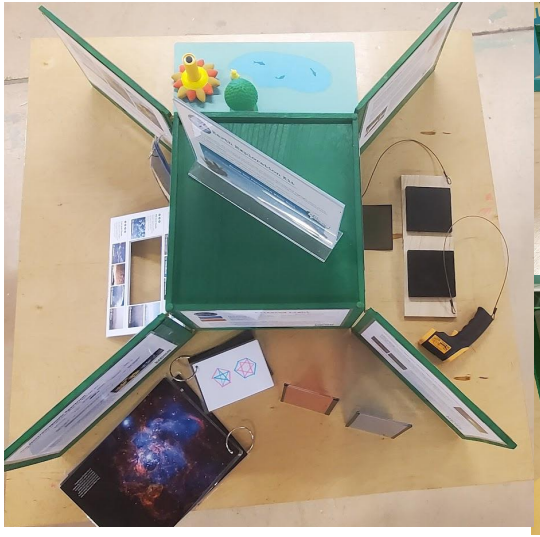


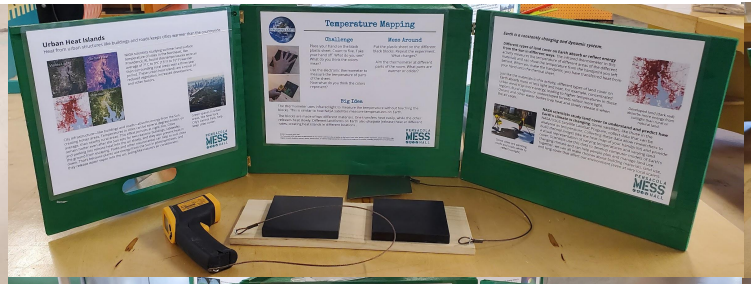


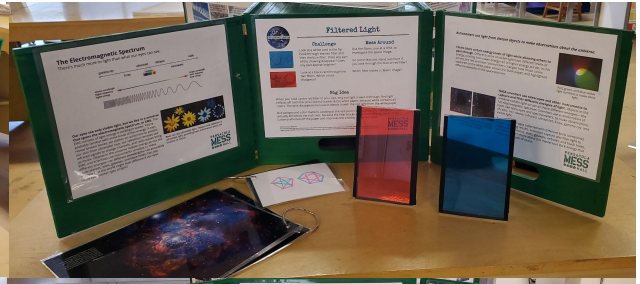
Earth Exploration Kits

Activities

- Design Build Test
- Temperature Mapping
- Cloud Viewer
- Filtered Light
- Moon Bear’s Shadow







Earth Explorations Kit

Audience

Kits will be presented at each of the 11 local libraries for about 1 month each. These libraries include inner city, suburban, and rural.

Kit signage also includes information about checking out a pass for a free family visit to the MESS Hall and information about citizen science.

Kits are at the first library now.

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WEST REGION

CA, Berkeley
The Lawrence Hall of Science

The Lawrence Hall of Science
UNIVERSITY OF CALIFORNIA, BERKELEY

Ime Edokpayi, Museum Educator

PROJECT DESCRIPTION: We plan to offer a series of Earth & Space science learning events with our local libraries. We will co-plan these events with our partner libraries to ensure that the content is relevant, meaningful and of interest to the communities served.

Past library initiatives at The Lawrence

2011 — 2015 — 2019 — 2021

Vallejo Inventor's Lab

The Lawrence and Solano County Libraries partnered to increase access to STEM programming in county.

Mobile Inventor's Lab

The Lawrence recruited Solano, Alameda, and Contra Costa Libraries to continue offering accessible STEM programming.

GSK Science In the Summer

GSK sponsored program offering engaging STEM activities and opportunity to "be the scientist"

Lawrence On-The-Go

Current Initiative to increase community outreach efforts. STEM program offerings for Bay Area communities and schools

Strategy

Why Libraries?

- Already working with diverse communities
- Community hubs that offer increased accessibility
- Often have resources that compliment science center mission- Free Museum Passes, Lunch programs, Storytime Science, etc.

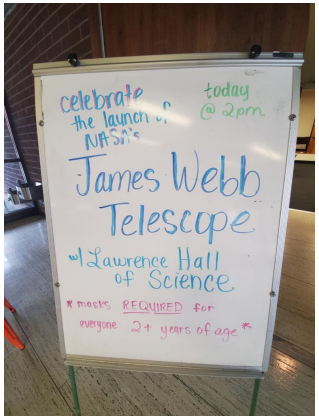
Current Project

Vallejo Webb Telescope Event

- Offered Space Science Festival for families in December 2021
- Facilitated activities around light, mirrors, and rockets

Lessons:

- Timing
- Promotion
- Library and Volunteer Support



Current Project

Growing Partnership with Hayward Public Library

- Collaborated on Community Event August 2021
- Planning Space Science Festival June 2022
- Planning Mobile Programming for Summer and Fall 2022

Lessons:

- **It's a small world** - The museum community is tight knit and supportive, much like libraries. It never hurts to reach out - internally and externally!
- **Inch wide, mile deep** - Collaborating with one partner to serve specific community allows for creative approaches

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NORTHEAST REGION

NY, Port Jefferson
Long Island Explorium

Jake Murphy: Senior Educator &
Research Officer:
Senior educator & Research Officer

"Reach For The Stars" - An interactive (family/teen night program) exploring space and beyond. Designed STEM activities will allow students to expand their critical thinking skills and lead to their own creation from innovation.

Strategy: Give a different approach to STEM

Why did we work with the libraries?

Provided the program to low income areas that have minimal STEM education in order to bring more exposure to STEM Science.

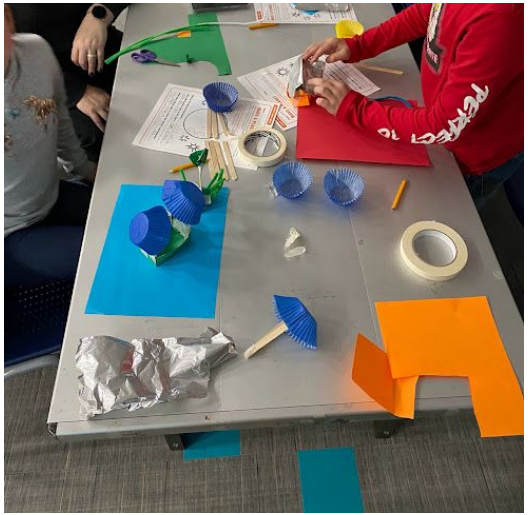
- No Admission Fee
- Welcomed walkin
- Capacity 30 guest
- Topics on meteors, offworld habitat, & food security

STEM activities conducted

Three sessions: 15 - 20 people each

Teen Night

Kids Night 1



Kids Night 2

What would we do different?

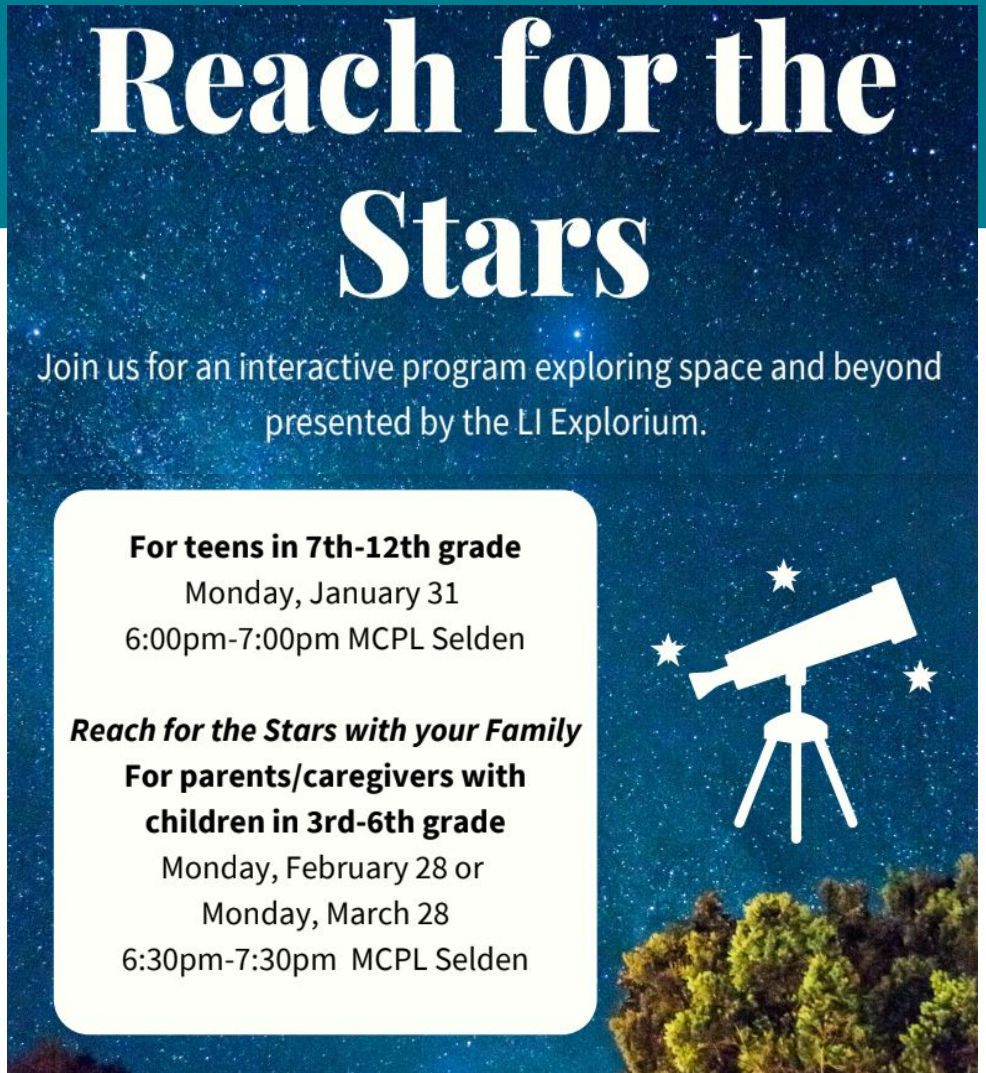
Learning from experience

- Have a backup date to reschedule
- Enhance each lessons connection

Valued Resources

Reasons for success

- Good communication
- Shared media



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Session Resources

Additional Resources

- **NISE Network Books, Reading, and Storytelling** https://www.nisenet.org/books
  - STEM read-aloud storybooks, storytelling, companion hands-on activities
  - library collaboration resources
  - annual events such as Summer Reading Programs
  - STEM tactile and Braille books for visually impaired participants
- **Library STEM Resources**
  - STARnet Libraries https://www.starnetlibraries.org
  - STARnet Libraries STEM Activity Clearinghouse http://clearinghouse.starnetlibraries.org
  - LEAP into Science: https://www.fi.edu/leap
  - Cornerstones of Science: https://cornerstonesofscience.org
- NISE Network Museum & Community Partnerships: Collaboration Guide
  - https://www.nisenet.org/collaboration-guide

Questions? Discussion?

Some themes that emerged from these projects working with libraries

- Why collaborating with libraries
- Working with library system structures and branches
- Roles and responsibilities (e.g. for program / event promotion)
- Finding a champion, making a personal connection
- Additional library programs:
  museum admission pass borrowing, book displays, storytimes

Thank You

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This material is based upon work supported by NASA under cooperative agreement award numbers NNX16AC67A and 80NSSC18M0061. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the view of the National Aeronautics and Space Administration (NASA).