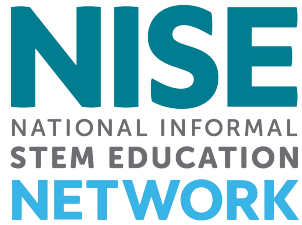


# Earth & Space Project-Based Professional Learning Community



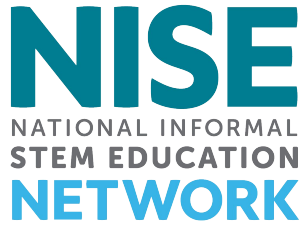
## April Concurrent Session A1

### 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



EXPLORE SCIENCE  
**Earth & Space**

## Co-Creation and You

- **Josh Sarver**, COSI, Columbus, OH
- **Amy Sayle & Nick Eakes**, Morehead Planetarium and Science Center, Chapel Hill, NC
- **Jill Kary**, Arkansas State University Museum
- **Peregrine Bratschi & Stepheny Hine**, Museum of Life and Science, Durham, NC

# OH, Columbus COSI



NAME: Josh Sarver

PROJECT DESCRIPTION: Our project integrates the NISE Network resources into COSI Connects, a digital portal to hands-on activities, videos, virtual tours, and much more. Our project works to showcase that science is everywhere and for everyone. Our hope is that we can find individuals within the community that can serve as models for future scientists.











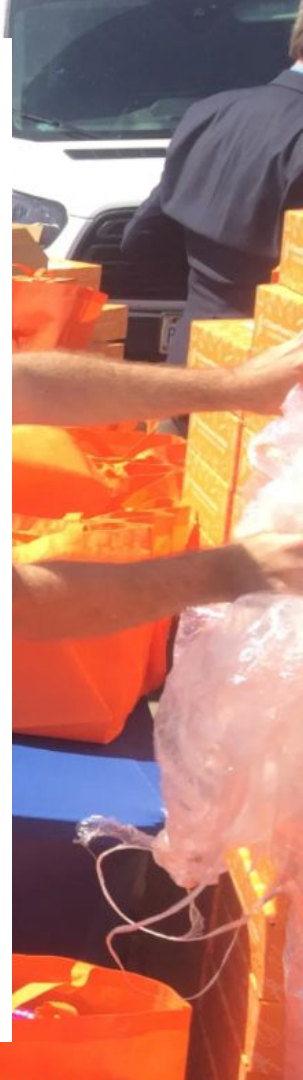
In Collaboration With

  
Center of Science and Industry

And



The Piqua Public Library  
Children's Department  
*Presents:*  
**LEARNING LUNCHBOXES!**  
**(ONE PER FAMILY WHILE SUPPLIES LAST)**









# NC, Chapel Hill

## Morehead Planetarium and Science Center



Amy Sayle, Nick Eakes

### PROJECT DESCRIPTION:

We collaborated with the Boys & Girls Club of North Central North Carolina to design and host a Star Party event for members from clubs in 3 NC counties that featured safe solar viewing and hands-on astronomy activities, and was supported by a diverse group of trained undergraduate student Star Party ambassadors.







# BECOME A SPACE EXPLORER WITH US!

MONDAY, APRIL 11 | 3 - 6 PM

Join the BGCNCNC and Morehead Planetarium and Science Center in Oxford, NC, on Monday, April 11th, for an exciting exploration of space science at the North Central North Carolina Star Party! Students and families are invited to participate in:

- Safe observing of the Sun through a solar telescope
- Viewing the rising Moon through a telescope and binoculars
- Hands-on astronomy activities led by educators from UNC-Chapel Hill
- The science and engineering involved with NASA's James Webb Space Telescope – named for Oxford's own James Webb (NASA administrator during the Apollo program)



We hope to see your family at this stellar event!



**NC**  
SciFEST

Find more science events  
[www.NCSciFest.org](http://www.NCSciFest.org)

BGCNCNC Granville County  
105 West Street  
Oxford, NC 27565



# ¡CONVIÉRTETE EN EXPLORADOR ESPACIAL CON NOSOTROS!

LUNES 11 DE ABRIL | 3 - 6 PM

¡Únase al Morehead Planetario y Centro de Ciencias y BGCNCNC en Oxford, NC, el lunes 11 de abril, para una exploración de la ciencia espacial en la Fiesta de las Estrellas de North Central North Carolina. Se invita a los estudiantes y familias a participar en:

- Observación segura del Sol mediante un telescopio solar
- Observación de la Luna creciente a través de un telescopio y binoculares
- Actividades prácticas de astronomía dirigidas por educadores de la UNC-Chapel Hill.
- La ciencia y la ingeniería relacionadas con el telescopio espacial James Webb de la NASA, llamado así por el propio James Webb de Oxford (administrador de la NASA durante el programa Apollo)



Esperamos ver a su familia en este evento estelar.



**NC**  
SciFEST

Encuentre más eventos de ciencia en  
[www.NCSciFest.org](http://www.NCSciFest.org)

BGCNCNC Granville County  
105 West Street  
Oxford, NC 27565













































# AR, Jonesboro Arkansas State University Museum

Jill Kary



Our project will focus on the ways in which Earth and Space influenced and shaped the cultures, religions, and ways of life of historic N. E. Arkansans.



# Search the Skies for Black History

Every Saturday in February, 2022, A-State Museum presented Black History Month Earth and Space activities.

Visitors learned that enslaved African Americans sought freedom by navigating the stars to find and bravely follow the North Star.

Guests also learned that moonlight casts shadows on Earth. Fugitives to freedom traveling at night risked discovery and capture unless they disguised their silhouette.



# Follow the Drinking Gourd

By Jeanette Winter

Visitors first stopped at the story-time tent to learn about a song called, "Follow the Drinking Gourd (Big Dipper)." The book describes one family's brave venture as they navigated the stars to freedom.



Khalia Pugh, an advisor for this project.

# How to Find the North Star

Next, guests were ushered into the Tinkering Studio to learn how to find the Big Dipper, Little Dipper, and at the end of Little Dipper's handle, the North Star. But on the way, they had fun with these NISE Net activities....



Star Formation

Nebula  
Spin Art









# Moon Shadows

Guests were presented with artist mannequins representing people from history and asked to change their silhouettes.



Young lady from history

Figure standing in shadow-box with moon lamp shining behind it.





# NC, Durham

## Museum of Life and Science

NAME(S): Peregrine Bratschi (they/them),  
Stepheny Hine (she/her)

**PROJECT DESCRIPTION:** The goal of our project, Life Finds a Way, is to consult with youth to co-develop programming about life in the universe that are relevant and accessible to underserved audiences. Our community partners at Durham Children's Initiative helped us recruit for a paid youth internship program. We also organized a Youth Advisory Council from our after school program. The interns— 2 high school students— are co-developing activities and prototyping them with the YAC.





# Project in process!



Design internship program

Recruit with community partner/s

Organize Youth Advisory Council

Train interns on program creation



Co-create activities

Prototype and evaluate with YAC

Do activities with visitors at NC SciFest



# Equitable, sustained engagement with underserved communities

Co-creation

Fair compensation





# What we're learning: Getting started



**Consult community partners:** Trust their expertise

**Prepare for setbacks:** Persevere, adapt, be patient (and push)

**Examine your bias:** Keep it constructive, be open to different perspectives

# What we're learning: The process

**Match expectations:** Listen-- and be clear and honest. Synthesize your goals

**Share the Floor:** co-creation is harder than just doing everything yourself

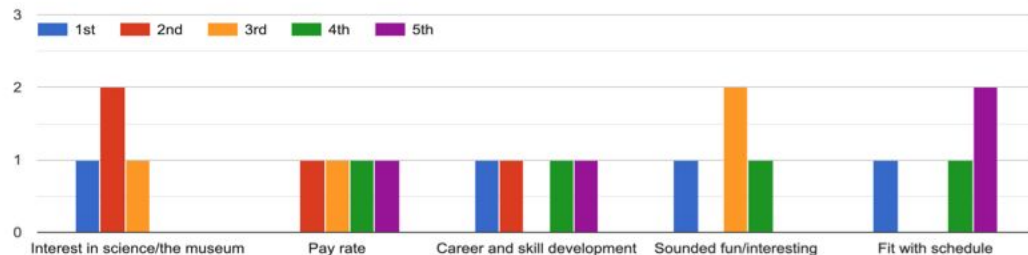
**High standards, not perfection:** maintain high expectations, believe in them (and you!), but let go of need to be "the best"





# Post-application survey

Please rank the factors that made you decide to apply for this position:



Would you apply for this position or a position like this again? Why or why not?

4 responses

Yes I found it really connecting with what I'm learning and would like to get better in this

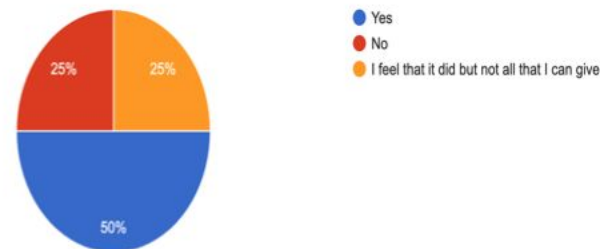
Maybe. I am not the best writer so this was a application I had to write the most about myself and it was very hard. This is the most writing I had to do because most of my interviews have been in person or answering questions off of a questionnaire.

Yes because its mostly surrounded in what I'm into when it comes time o science

Yes I would because it would be a great experience and It's seems interesting to me.

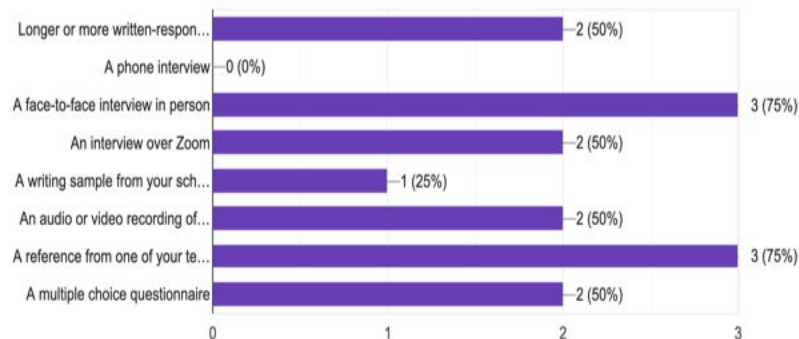
Did your application feel like a good representation of you and your skills/experiences?

4 responses



Which of the following would help you express your skills/experiences on an application: (select all that apply)

4 responses



# Evaluating programs for accessibility and relevance

Are the  
materials/concepts  
familiar?  
Interesting?

Relevant to your  
daily life and goals?

I have heard about this subject before	Yes/No	He escuchado sobre este tema antes.	Sí / No
I am interested in this field of science	Yes/No	Estoy interesado en este tema de la ciencia.	Sí / No
I felt confident about using these materials	Yes/No	Me sentí confidente en el uso de estos materiales.	Sí / No
I will use these concepts again in school	Yes/No	Usaré estos conceptos nuevamente en la escuela.	Sí / No
I recognized the materials and knew what they were	Yes/No	Reconocí los materiales y supe lo que eran.	Sí / No
I have learned these concepts in school before	Yes/No	He aprendido estos conceptos en la escuela antes.	Sí / No
I want to learn more about this subject	Yes/No	Quiero aprender más sobre este tema.	Sí / No
I felt nervous or uncertain using these materials	Yes/No	Me sentí nervioso o inseguro al usar estos materiales.	Sí / No
These concepts were new to me	Yes/No	Estos conceptos eran nuevos para mí.	Sí / No
I know other people who are interested in this subject	Yes/No	Conozco a otras personas que están interesadas en este tema.	Sí / No
I want to do a career in this field of science	Yes/No	Quiero hacer una carrera en este tema de la ciencia.	Sí / No
I could teach someone else about this subject	Yes/No	Podría enseñarle a alguien más sobre este tema.	Sí / No
I use these concepts outside of school	Yes/No	Utilizo estos conceptos fuera de la escuela.	Sí / No
I felt comfortable using these materials	Yes/No	Me sentí cómodo usando estos materiales.	Sí / No
I will use these concepts in my life outside of school	Yes/No	Usaré estos conceptos en mi vida fuera de la escuela.	Sí / No



# Other takeaways

## **Paying interns:**

Stipends! Gift cards may also be a work-around

May need a Youth Work Permit

Immigration status info isn't necessary; W9 needs either Employment Authorization Number or SSN

## **Supporting interns:**

On the clock time for administrative tasks

Tech: laptops, printers

Snacks!

References, letters of recommendation

Level with discomfort— it means you're in new territory. That's a good thing!

# Session Resources

## Additional Resources

- NISE Network Museum & Community Partnerships: Collaboration Guide  
<https://www.nisenet.org/collaboration-guide>



# Thank You

