While you’re waiting:
1) Find the toolbar – it will either be on the bottom or top of your Zoom window
2) Introduce yourself in the chat box (please select “All Panelists and Attendees” not “All Panelists”)
3) Click audio “Join by Computer” – you won’t have microphone access

Tip for viewing: You can resize and move the location of the video and slide screens by clicking and dragging them
Expectations / Guidelines

• Try to use the Q&A feature for questions

• When using Chat, make sure your messages are being sent to “All Panelists and Attendees”

• We are all working from home: tech problems may happen!

• Call in #’s:
  • +1 646 876 9923 ; +1 669 900 6833 ; +1 253 215 8782 ; +1 301 715 8592 ; +1 312 626 6799 ; +1 346 248 7799 ; +1 408 638 0968
  • Webinar ID: 928 879 002
Facilitator Introductions

Claire Ratcliffe (Space Science Institute)
Keliann LaConte (Space Science Institute)
Niki Becker (SciGirls)
Kristin Pederson (SciGirls)
Today’s Agenda

Ice Breaker/Poll Question

STEAM Equity Project Overview

SciGirls Strategies: How to Engage Girls in STEAM

SciGirls Activity: Parachute Parade

Group Reflection and Discussion

Q&A
Icebreaker

What is something you are looking forward to about autumn?
Poll Question

Have you ever gone skydiving?

A. Yes, and I loved it!
B. Yes, and it was terrifying and I will never go again
C. No, but I want to!
D. No, never in a million years
STEAM Equity Project
Empower tweens and their families around equitable STEAM learning and career paths
Collaborate and co-create with Latino* populations

*The project team uses the term “Latino” but acknowledges that communities and individuals may identify as Latino/a/x, Hispanic, Chicano/a, or a variety of other terms.
Advancing Informal STEM Learning

This material is based upon work supported by the National Science Foundation under Grant No. DRL-1906172.

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.
Culturally Responsive STEAM Programming: Engaging Latinx Communities in Rural Areas

Tuesday, September 15th at 2:30 pm MT

Register at www.starnetlibraries.org/resources/webinars
Join an annual forum on gender equitable and culturally responsive STEAM learning for:

- Networking Strategies
- Resources
- Hands-on STEAM activities
“Community Dialogues and Libraries,” with Lisa Jackson, Librarian, Supervisor and community members at African American Research Library and Cultural Center (AARLC)

https://stemforall2020.videohall.com/presentations/1653
SciGirls Strategies: How to Engage Girls in STEM

Niki Becker, STEM Media and Education Specialist
Kristin Pederson, Senior Director, STEM Media and Education
Project Development
The Big Idea

Media and education that changes how girls see STEM and how the world sees girls.
Our Approach

- On TV
  - national PBS Kids series

- Online
  - safe, social networking website

- On the Ground
  - activities and professional development
Boys and girls do not display a significant difference in their abilities in STEM. The cause is social and environmental.

Differences consistently appear in girls’ interest and confidence in STEM subjects, starting at a very young age.

These differences can be linked to a negative self-perception, enhanced by stereotypes.
The SciGirls Strategies: How to Engage Girls in STEM

1. Connect STEM experiences to girls’ lives.
2. Support girls using STEM practices.
3. Empower girls to embrace struggles.
4. Encourage girls to challenge STEM stereotypes.
5. Emphasize that STEM is collaborative and community-oriented.
6. Interact with diverse STEM role models & mentors.

In order to be effective at implementing the SciGirls Strategies, educators need to:

Provide an inclusive learning environment.

TIPS:
- Create a warm and welcoming space that is accessible to all.
- Create an atmosphere of mutual respect.
- Use icebreakers so youth can introduce themselves in a non-threatening manner.
- Provide opportunities for youth to voice their opinions.

Use culturally responsive teaching practices.

TIPS:
- Understand your culture and how it affects others.
- Get to know your youth and build on their life experiences.
- Communicate high expectations for behavior and performance.
- Validate youth’s bilingual abilities to leverage learning.

www.scigirlsconnect.org
SciGirls and Latinx Audiences

- Latina SciGirls: Promoting Middle School-Age Hispanic Girls' Positive STEM Identity Development
  - 6 episode Spanish-first series
  - Two year research and evaluation outreach program
    - 16 partner organizations running STEM programs for Latinas grades 5-8
    - 280+ girls, 560+ Latinx family members reached
    - Findings: girls reported higher rates of emotional connection to STEM (an important component of STEM-related identity development) after exposure to the various Latina SciGirls interventions
SciGirls and Latinx Audiences

• *Latinas At Work* Role Model Series
  - Twelve 3-5 minutes videos showcasing Latinas in STEM Careers

• *Engaging Latino Families Guide*
I’m Alma Stephanie Tapia, and I’m a materials engineer at NASA.
Virtual Programs

• Utilize platform features
• Get their attention: ask questions, good visuals, add surprises
• Use a variety of learning techniques: act out, draw, chat verbally or with the chat box
• HAVE FUN! Play games.
Parachute Parade

Your Group Needs:

• **Materials To Build Your Parachute**
  – At least 3 from this list: plastic wrap, tissues, paper towels, plastic bags, tissue paper, coffee filters, handkerchiefs
  – String or thread
  – Scissors
  – Tape and/or paper clips
  – Paper & pencil
  – 1 toy mini figurine

• **Stopwatch To Time Your Descent**
Parachute Parade Debrief

What about this activity showcased the SciGirls Strategies?
The SciGirls Strategies: How to Engage Girls in STEM

In order to be effective at implementing the SciGirls Strategies, educators need to:

Provide an inclusive learning environment.

**TIPS:**
- Create a warm and welcoming space that is accessible to all.
- Create an atmosphere of mutual respect.
- Use icebreakers so youth can introduce themselves in a non-threatening manner.
- Provide opportunities for youth to voice their opinions.

Use culturally responsive teaching practices.

**TIPS:**
- Understand your culture and how it affects others.
- Get to know your youth and build on their life experiences.
- Communicate high expectations for behavior and performance.
- Validate youth's bilingual abilities to leverage learning.

www.scigirlsconnect.org
Thank you!

Niki Becker: nbecker@tpt.org
Discussion

In what ways has your library intentionally created STEAM learning experiences for girls?
Discussion

How do you connect with your tween and girl patrons to learn about their interests?
Thank you!

Any Questions?