


# Best program ever!

A photograph of three people at a conference. On the left, a man with a beard and glasses is smiling and gesturing with his hands. In the center, a woman with red hair tied back is wearing a grey sweater and a red scarf, looking excited with her mouth open. On the right, a woman with dark hair is smiling and clapping. They are all wearing name tags.

**NISE**  
NATIONAL INFORMAL  
STEM EDUCATION  
**NETWORK**

# Presenters

<b>ALI JACKSON</b>	Sciencenter
<b>BRAD HERRING</b>	Museum of Life + Science
<b>JEANNIE COLTON</b>	Arizona State University
<b>KEITH OSTFELD</b>	Children's Museum of Houston
<b>RAE OSTMAN</b>	Arizona State University + Science Museum of Minnesota
<b>STEPHANIE LONG</b>	Science Museum of Minnesota

# Session overview



**NISE Net** in a nanoshell

**Crash course** in program development

**Rapid prototyping** session

**Resources** for development, delivery, training, and evaluation

**NISE NETWORK**



*NISE Net is the **National Informal STEM Education Network.***

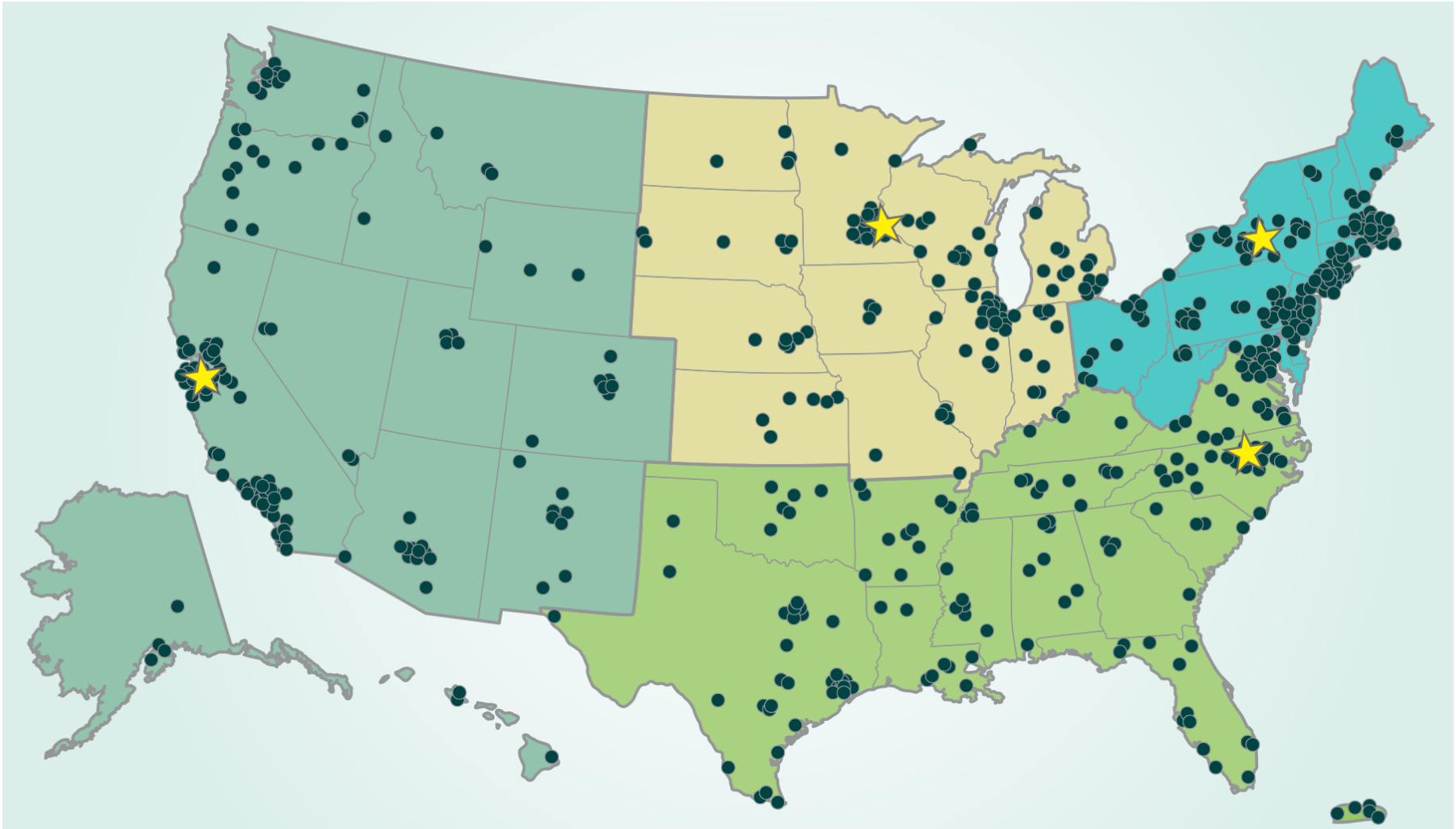




*NISE Net supports **informal learning about STEM** in communities across the United States.*



Over **600 organizations** regularly participate in Network activities.





*NISE Net engages **all audiences** in learning about STEM in ways that are fun and easy to understand.*





*NISE Net improves the **practices and skills** of educators and scientists.*



*Together, Network partners reach **millions of people** each year!*





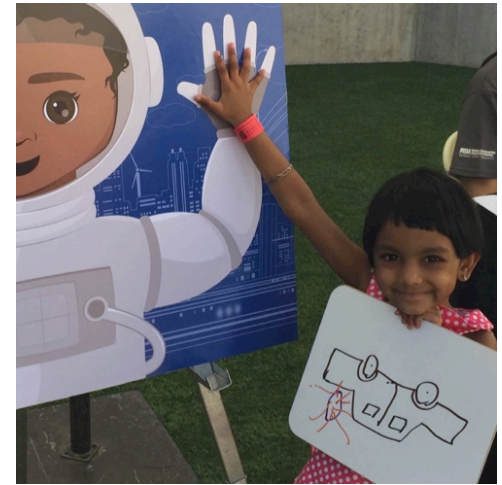
*We have projects in **many areas** of STEM.*



Nanotechnology



Synthetic biology



Sustainability



Earth and space science



Chemistry

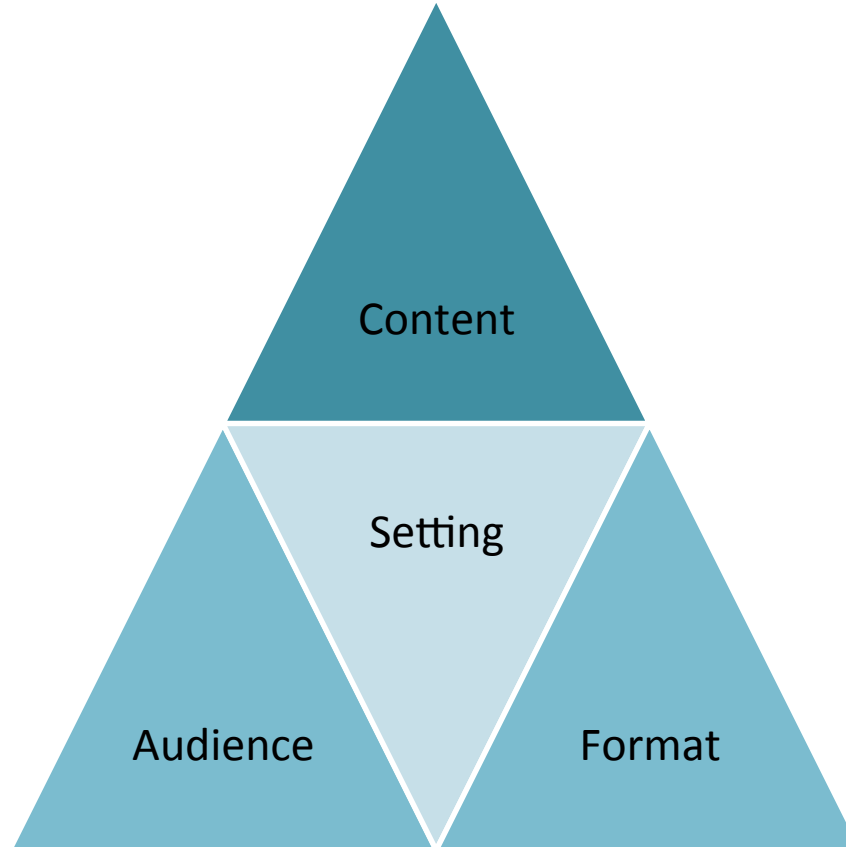


Making



# CRASH COURSE

# Program elements



# Horton Senses Something Small



**Setting:** Children's museums and other informal learning environments

**Big idea:** There are things that are too small to see

**Audience:** Early learners

**Format:** Story time followed by hands-on activities



# Attack of the Nanoscientist



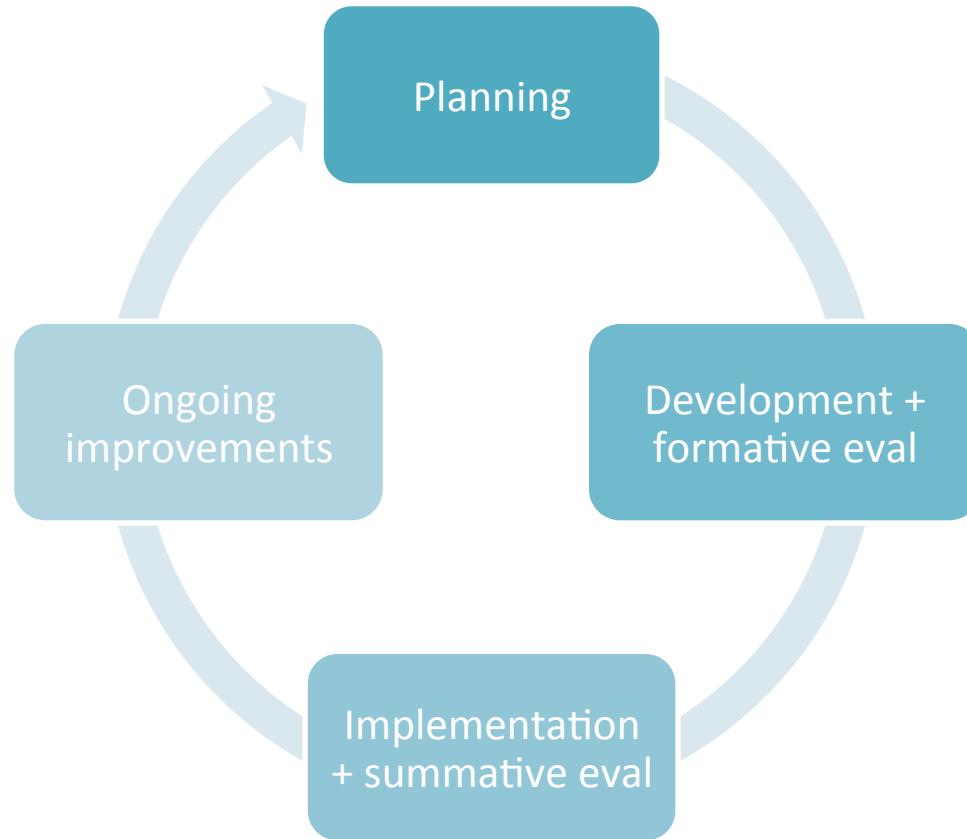
**Setting:** Science museums and other informal learning environments

**Big idea:** Nanoscience may lead to new applications medicine, computing, materials, defense, environment, and consumer products.

**Audience:** All ages

**Format:** Comedic theater

# Life cycle



# Development process



## Create prototype

- Research online
- Find successful examples
- Try things out



## Get input

- Educators
- Experts
- Participants



## Test systematically

- Traditional eval
- Reflective practice
- Team-based inquiry



## Make improvements

- Strengthen learning
- Polish materials



# Development tips

## LEARNING OBJECTIVES

- **Be explicit** about your audience and objectives
- **Be ruthless** about designing for them
- **Be realistic** about what's possible in an informal learning environment

## BEST PRACTICES

- **Use universal design** principles
- **Use an iterative process**
- **Get feedback** from peers, participants, and experts

## PRACTICAL CONSIDERATIONS

- **Think ahead** to implementation, so it's easy to set up, deliver, clean up, and store materials
- **Document** the program so others can learn and use it



**RAPID PROTOTYPING**

# Rules



**CHALLENGE:** You'll draw your program topic from a hat. Your program must address the challenge on your card!

**MATERIALS:** You'll be given some silly props that you must incorporate! You're also free to use the materials on the supply table.

**PROGRAM AUDIENCE & FORMAT:** These are up to you, but be sure your group has a specific audience in mind.

**PRESENTATION:** You have just a few minutes total to introduce your topic and deliver your program. In your intro, tell us:

- Your challenge
- Your program's name
- Your program's "big idea"
- Your target audience and program format

**HAVE FUN!**



# **WRAP UP + RESOURCES**

# Three things we learned



# NISE Net

**Website:**

[nisenet.org](https://nisenet.org)

**Newsletter:**

[nisenet.org/newsletter](https://nisenet.org/newsletter)

**Social media:**

[nisenet.org/social](https://nisenet.org/social)





# nisenet.org

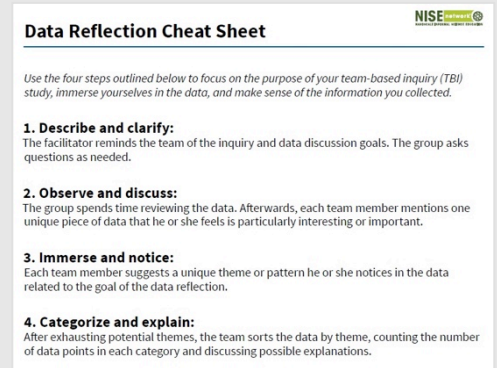
## READY-TO-USE RESOURCES

Professional development guides  
Program templates  
Evaluation tools  
Training slides and videos  
Improv exercises  
...and more!



## MANY TOPICS

Programs, activities, games  
Presentation skills  
Partnerships and collaborations  
Universal design  
Team-based inquiry  
...and more!



# Professional resources – nisenet.org

## **Guides**

Bilingual Design Guide for Educational Experiences in Museums  
Collaboration Guide for Museums Working with Community Youth-Serving Organizations  
Gaming and the NISE Network: A Gameful Approach to STEM Learning  
NanoDays: A NISE Network Guide to Creating Activity Kits, Building Communities, and Inspiring Learning  
Nanotechnology and Society: A Practical Guide to Engaging Museum Visitors in Conversation  
Program Development: A Guide to Creating Effective Learning Experiences for Public Audiences  
Team-Based Inquiry: A Practical Guide for Using Evaluation to Improve Informal Education Experiences  
Translation Process Guide for Educational Experiences in Museums  
Universal Design Guidelines for Public Programs in Science Museums

## **Videos**

America's Next Top Presenter  
Speed-ucate Video, or How to Have an Effective Science and Society Conversation  
Team-Based Inquiry Training Videos  
(Plus lots of training videos for specific activities!)

## **Tools**

Improv Exercises  
Museum & Community Partnerships: Collaboration Guide and additional resources  
NanoDays Training Materials  
Nano and Society Training Materials  
NISE Network Program and Activity Templates  
NISE Network Program Evaluation Tools

## **Workshop Recordings and Packages**

Bilingual Audiences Workshop Resources  
Improving NanoDays Trainings with Team-Based Inquiry: Partner Examples  
Making Evaluation Design Decisions: When Basic Evaluation Methods Meet the Real World  
Team-Based Inquiry Stories: NISE Network Partners Share What Works (and What Doesn't!)  
Universal Design of Educational Programs Workshop Resources  
Videos 101: Tips, Tricks, and Strategies for Small-Scale to Large-Scale Video Production

# Thank you



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