NISE Net Online Workshop

Museum Community Partnerships

Part 1: Libraries

Tuesday, October 10, 2017

Welcome!

Today's presenters are:

Julia Skolnik and Tara Cox from LEAP into Science at The Franklin Institute

Keliann LeConte, Professional Development Manager, Space Science Institute

Andrew Spence, Manager of Public Programs and Events, Kentucky Science Center

Anna Hurst, Director of Museum, Park, and Library Programs, Astronomical Society of the Pacific

As we wait to get started with today's discussion, please:

- **Update your display name.** Include your first & last name, institution and location.
- **Introduce yourself**! Type your name and institution into the Chat Box
- **Questions?** Feel free to type your questions into the Chat Box at any time throughout the online workshop or use the raise your hand function in the participants list and we'll unmute your microphone.

Today's discussion will be recorded and shared on nisenet.org at: nisenet.org/events/online-workshop

Leap into Science:

Cultivating a National Network for Informal Science & Literacy Learning

Tara Cox & Julia Skolnik

October 10, 2017

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Thanks to NISE Net for hosting us, and Dr. Jayatri Das who has led TFI's participation in the network.

What's one thing you hope to learn today about working with libraries?

Connecting hands-on science and children's books to engage underserved preK-5th grade children and families in libraries across Philadelphia, through curricula, training, and partnerships.

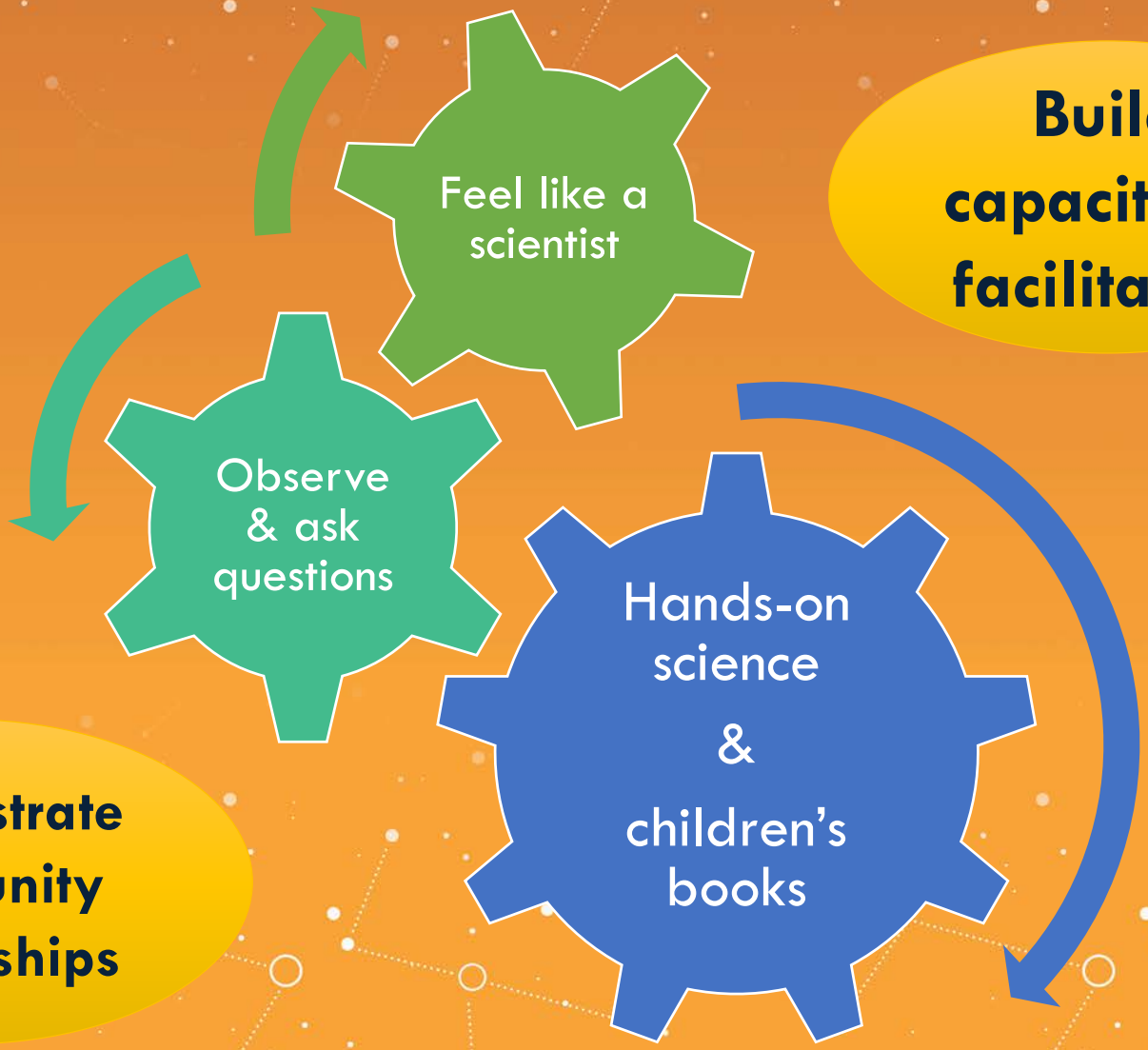
2007-2011 Philadelphia Pilot

2011-2017 National Pilot

NSF

INSTITUTE of Museum and Library SERVICES

Program Model



Build capacity of facilitators

Demonstrate community partnerships

Strategies for Museum-Library Partnerships

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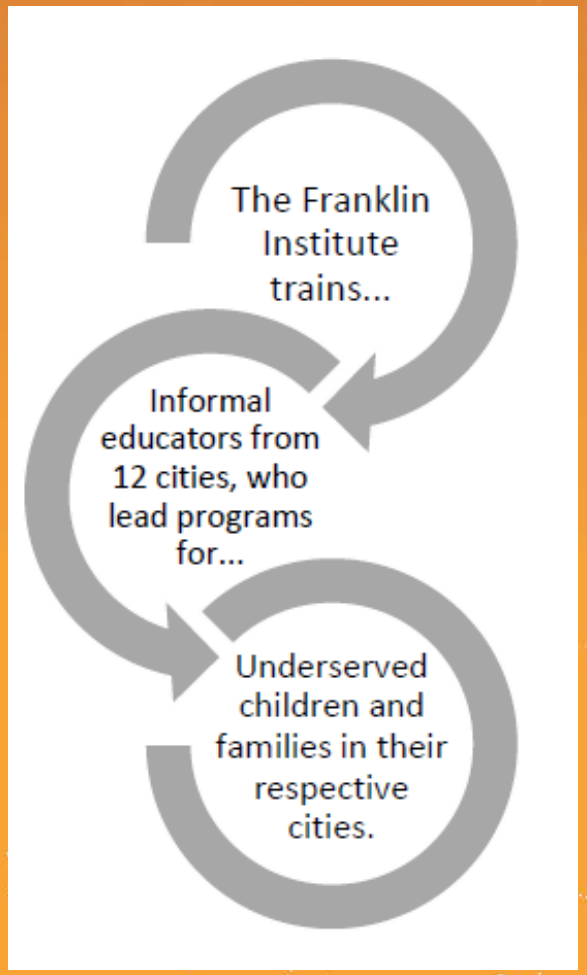
1. Look at what your local libraries are **already doing regarding STEM** (e.g. Maker Spaces). Value their assets and infrastructure.

2. Think about books as a **common access point** for children, families, libraries, and science learning.

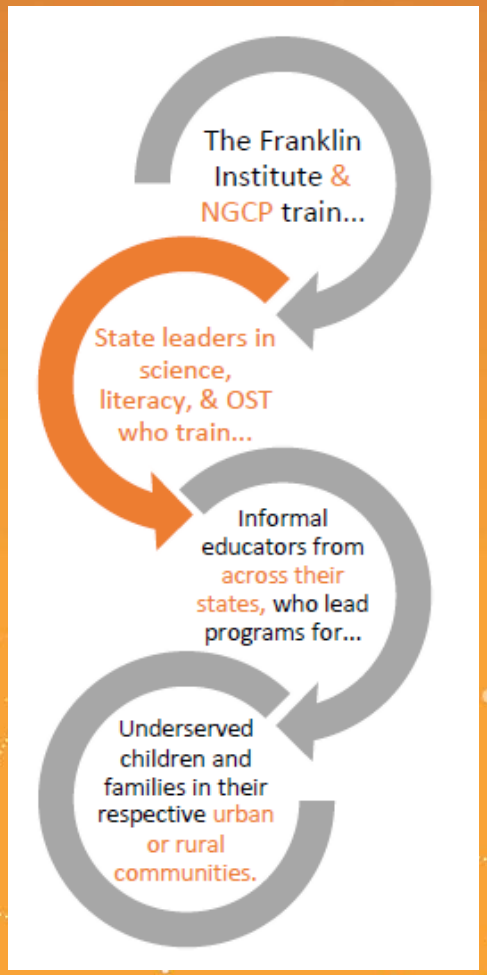
3. Consider **professional development** of librarians as informal STEM facilitators.

Leap National Network

Previous Model (2007-2017)



New Model (2017-2021)



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Free LIBRARY OF PHILADELPHIA

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National Girls Collaborative Project

Institute for Learning Innovation

EDC Learning transforms lives.

Join us!

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1. Pursue a state partnership and apply to be **a state leadership team** in 2017, 2018, or 2019.

2. Connect with your state's **NGCP collaborative,** to receive communications about how to participate in upcoming Leap and other trainings.

3. Contact us!

   www.fi.edu/leap (+ videos!)

   www.ngcproject.org

   tcox@fi.edu & jskolnik@fi.edu

NASA@ My Library
A National Earth and Space Science Initiative that Connects NASA, Public Libraries and their Communities

NCIL National Center for Interactive Learning

Resources for Partnering with Public Libraries

Tuesday, October 10, 2017

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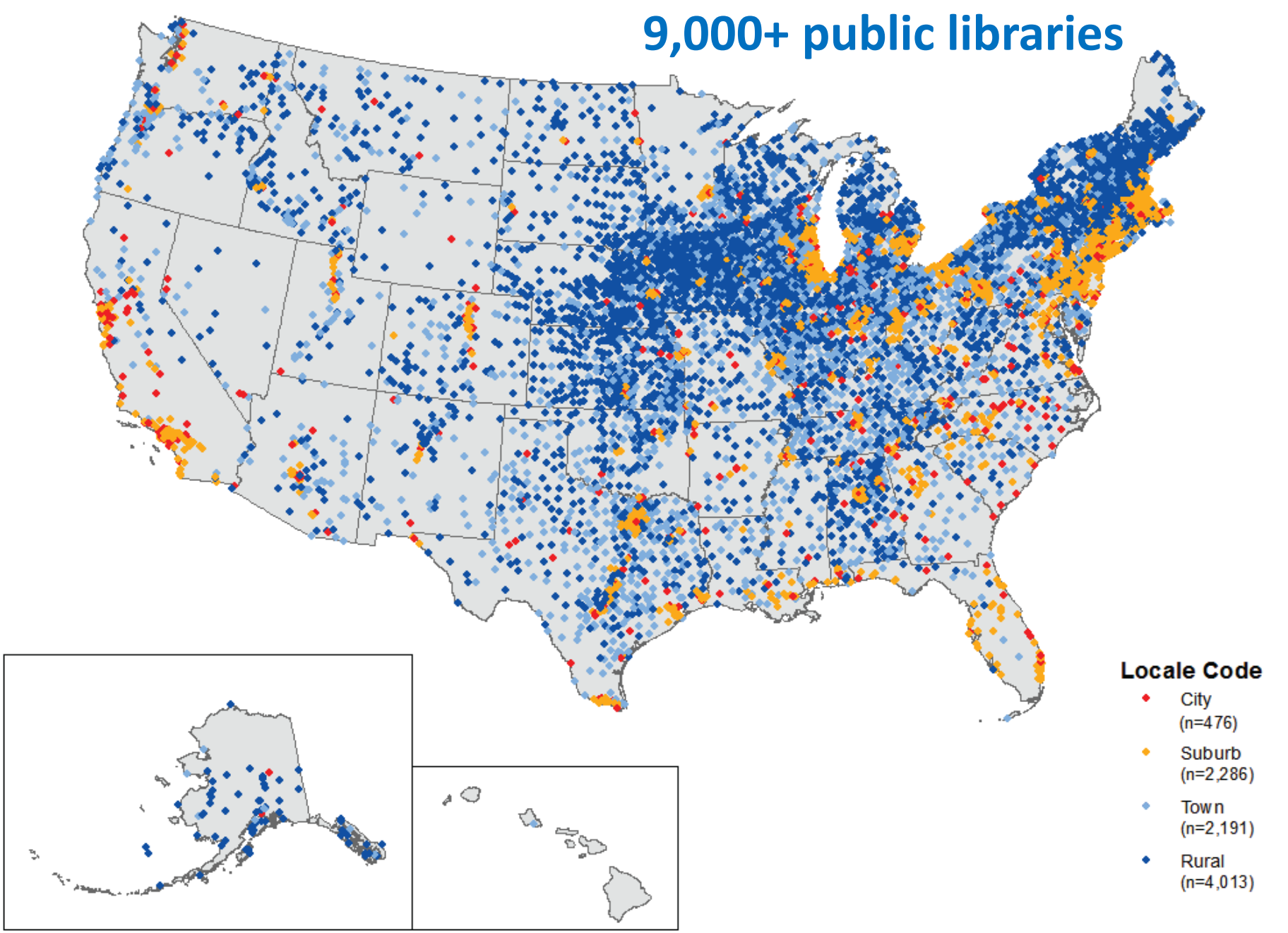
NASA ALA American Library Association Cornerstones of Science PACIFIC SCIENCE CENTER EDC Learning transforms lives.

Figure N-1. Public Library Administrative Entities in the United States, Fiscal Year 2014



Source: Public Library Survey, FY 2014, Institute of Museum and Library Services

Americans who are likely to have visited a public library in the past year:

- 57% women
- 55% parents
- 55% 16- to 29-year-olds
- 52% Blacks
- 50% with household incomes < $30,000/year

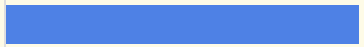
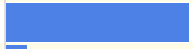
1.5 billion visits total per year

Horrigan, John B. “Libraries 2016” Pew Research Center, September 2016 Available at: http://www.pewinternet.org/2016/09/09/2016/Libraries-2016/

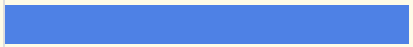
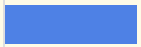
STEM in Public Libraries: National Survey Results

Hakala, J. S., MacCarthy, K., Dewaele, C., & Wells, M. (2016). *STEM in Public Libraries: National Survey Results*. Boulder, CO: University of Colorado. www.nc4il.org/images/papers/FINAL_STEM_LibrarySurveyReport.pdf

Hands-on and Art-based

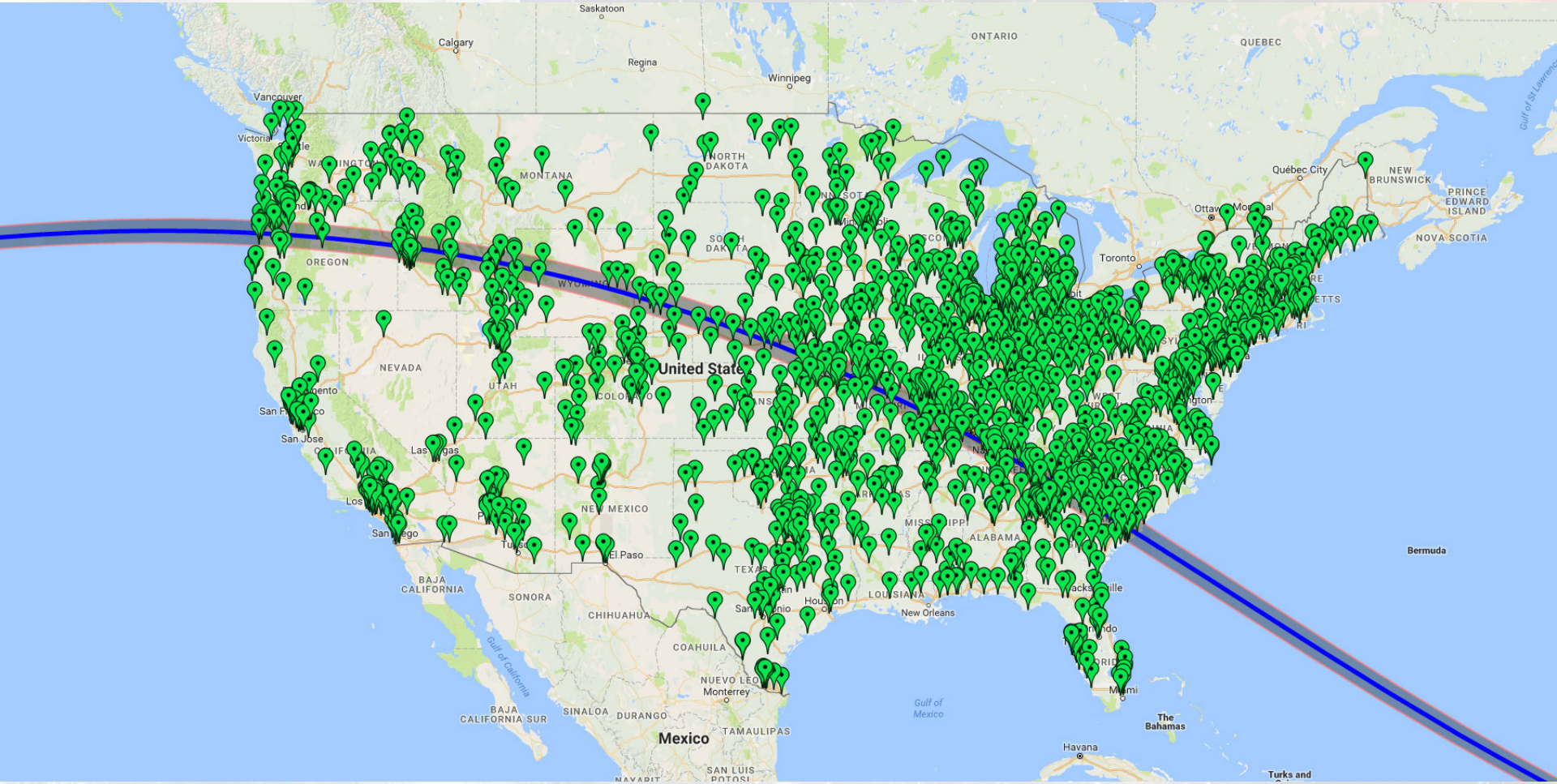
#	Answer		Response	%
1	Hands-on investigations		324	65%
2	Art-based STEM projects		254	51%
3	Demonstrations		187	37%
4	STEM-related reading programs		137	27%
5	Interactive exhibits		84	17%
6	Maker spaces		168	34%
7	Field trips		19	4%
8	Lectures		72	14%
9	Documentary showings		28	6%
10	Discussions		43	9%
11	Career-focused STEM learning programs		28	6%
12	Other:		39	8%
13	We do not offer STEM-rich learning experiences.		69	14%
14	STEM-related storytimes		246	49%
15	Observation/Looking experiences		142	28%

Targeted Ages

#	Answer		Response	%
1	Pre-K		271	57%
2	Elementary students		414	87%
3	Middle school students		305	64%
4	High school students		179	38%
5	Young adults		100	21%
6	Adults		108	23%
7	Seniors		49	10%
8	Mixed ages (Families)		171	36%
9	Other:		15	3%

Children aged **pre-K through middle school** are the most common target audience

The 2017 Solar Eclipse Event



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Upcoming 2018 STEM Programming Opportunities


Credit: NASA/Aubrey Gemignani

February 18-24
Engineers Week


Credit: JHU/APL

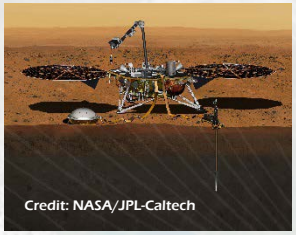
July/August
Parker Solar Probe Launch


Credit: ESA/ATG medialab

April 22
Earth Day


Credit: Afterschool Alliance

October
Lights On Afterschool


Credit: NASA/JPL-Caltech

May 5
NASA InSight Launch


Credit: NASA/GSFC

October
International Observe The Moon Night

www.starnetlibraries.org

NSF · Institute of Museum and Library Services · ALA American Library Association · Lunar and Planetary Institute · Afterschool Alliance

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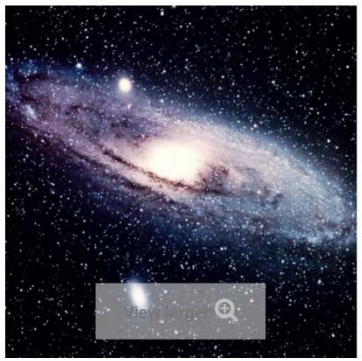
STEM ACTIVITY Clearinghouse

http://clearinghouse.starnetlibraries.org



Sorting Games: How Big? How Far? How Hot?

This NASA@ My Library Activity Guide will help library staff facilitate these sorting activities in large or small groups, with patrons from Pre-K to adult.

Open Activity

Report broken link

Tweet | Share | Google+ | Pinterest

Write a review

Send to a friend

Print

Content Area
Astronomy and Space

Age Group
Family
Pre-K
Early Elementary
Upper Elementary
Tweens (9-12)
Teens
Adults

Time to Complete Activity
10-20 minutes

Time needed to prep Activity
Under 5 minutes

Difficulty Level (by content)
Medium

Mess Level
Low

NSF | Institute of Museum and Library Services | ALA American Library Association | Lunar and Planetary Institute | Afterschool Alliance

Connect with State Libraries

- Consulting
- Coordination
- Communication
- Connecting
- Collecting

NASA@ My Library

A National Earth and Space Science Initiative that Connects NASA, Public Libraries and their Communities

SPACE SCIENCE INSTITUTE

NCIL National Center for Interactive Learning

PORTAL to the Public

NASA ALA American Library Association Cornerstones of Science PACIFIC SCIENCE CENTER EDC Learning transforms lives.

PORTAL to the Public

- Members of the Portal to the Public Network (PoPNet) partner with *NASA@ My Library* participant library branches.
- Each partnership co-designs programming to virtually connect library patrons with scientists who have gone through training to develop their engagement skills.
- Virtual programming is new for PoPNet but will strive to replicate the impacts we've seen in face-to-face interactions.

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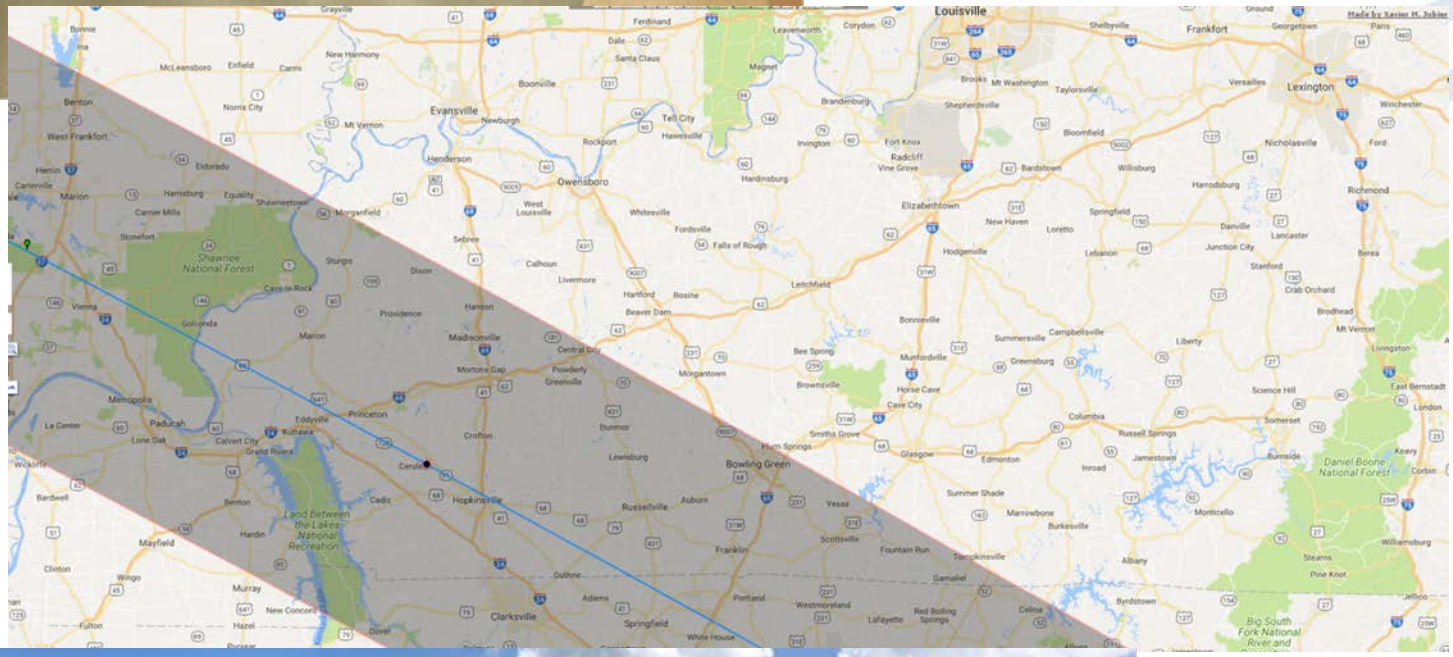

KENTUCKY SCIENCE CENTER

KENTUCKY SCIENCE CENTER

Science in Play is a progressive, next-generation learning experience for children and their families. Rich in loose parts and open-ended play, kids and adults are empowered to learn together and for life. We are combating the state's school readiness statistics with a keen focus on 21st century learning skills – All through the power of play.

Science in Play 2Go is the mobile version. With key elements that embody the philosophies behind the Science Center's permanent exhibit, *Science in Play2GO* is visiting libraries across Kentucky for 3-month residencies at no cost to the libraries or their visitors.

Thank You

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