Welcome! NGCP National Webinar: STEAM Resources for Libraries

Please respond to the poll on your screen.



















STEAM Resources for Libraries

May 17, 2022



NGCP Vision

The vision of the National Girls Collaborative Project is to support and create STEM experiences that are as diverse as the world we live in.



STEAM Resources for Libraries





Our Goals **Connect + Create + Collaborate**

Maximize access to shared resources within projects, and with public and private sector organizations and institutions.

Strengthen capacity

of existing and evolving projects by sharing exemplary practice, research, and program models, outcomes, and products.



STEAM Resources for Libraries



Create the tipping point

for gender equity in STEM by using the leverage of a network and the collaboration of individual girl-serving STEM programs.



NGCP Activities

- Network Partnerships
- IF/THEN Collection
- The Connectory
- FabFems
- National Webinars



STEAM Resources for Libraries







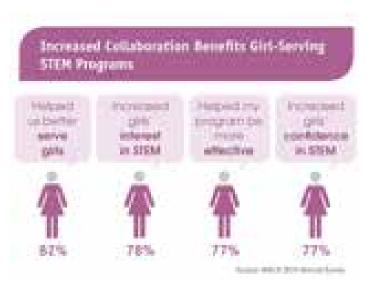






MILLION GIRLS MOONSHOT









A National Network **Of Collaborative Teams**

- NGCP programs and partners are in every state
- With 33 Collaboratives that support 41 states
- Together, we facilitate collaboration across 42,500 organizations
- Serving 20.2 million girls and 10 million boys



STEAM Resources for Libraries



Speakers

VIEWSPACE

Timothy Rhue II

Principal Informal Education Specialist at the Space Telescope Science Institute

Library Services Consultant working With SciStarter.org and Arizona State University



STEAM Resources for Libraries

CHECK IT OUT! CITIZEN SCIENCE AT YOUR LIBRARY

eap science Engineered by -

THE FRANKLIN INSTITUTE

Robin Salthouse

Tara Cox

NGCP staff working in collaboration to scale the Leap into Science Program



VIEWSPACE

VIEWSPACE

EXPLORE THE UNIVERSE WITH INTERACTIVES AND VIDEOS

INTERACTIVES

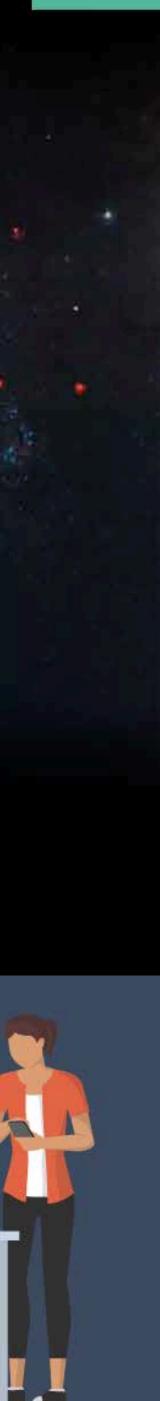
VISIBLE



X-RAY

MULTI-WAVELENGTH





Venue Login

National Citizen & Community **Science Library Network**



SciStarter.org/library-network









Helping libraries across the country gain the confidence, skills, and knowledge to engage their communities in citizen science.







What is citizen science?

A global movement that enables people from all walks of life to participate in real scientific research by making and sharing observations with scientists.

It's how people can make an impact on issues they care about!























Because of citizen scientists we now know...

- Bird populations have declined by 50%
- Birds are breeding earlier
- 50+ types of bacteria live in your belly button
- The first flowering of 19 species of plants has moved 9 days earlier over the past decade
- There's a new type of aurora in the night sky (and the citizen scientists named it Steve!)
- In one weekend in 2019, citizen scientists accomplished 2,566 research hours, or 3.5 months of lab-equivalent research time, for an Alzheimer's research project.

Create an account <u>SciStarter.org</u> to find a citizen science project that you're interested in today.











STALL CATCHERS

Accelerate Alzheimer's research by playing an online game.



ETERNA

Design and study complex RNA molecules to help scientists develop RNA-based medicines to combat global diseases.



NEUREKA

Play games and answer questions to improve mental health and dementia research.



GLOBE AT NIGHT Help gather light pollution data.



FLU NEAR YOU Spread the word. Not the flu.



ISEECHANGE

Document change in weather and climate in your community.









Library Network Goals

Build capacity

of libraries to become hubs for citizen science

Support a community

of libraries engaging their communities in citizen science

SciStarter.org/library-network









Broaden participation of diverse

communities in citizen science

Shape and accelerate scientific research

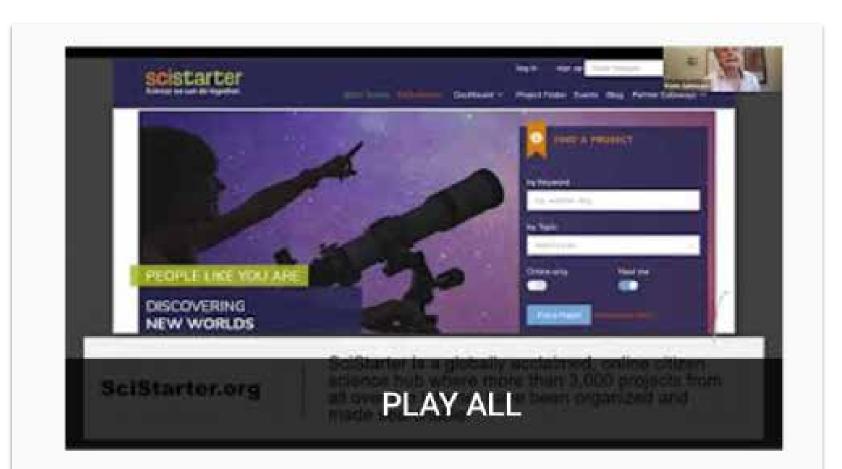






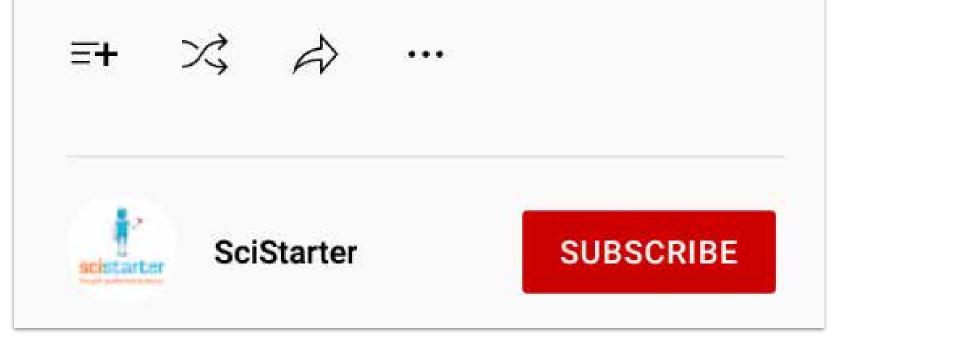


Network Webinars



SciStarter Library Network

12 videos · 33 views · Last updated on Jan 26, 2022













Watch previous webinars on YouTube, including:

- Introduction to Citizen Science
- How to Host a Citizen Science Event
- Deeper Dive into Citizen Science Kits

www.youtube.com/scistarter





Museumand Library



Citizen Science Kits



EXPLORING BIODIVERSITY

Document and identify plants and animals around you. Great for all locations and ages.



OBSERVING POLLINATORS

Identify and count pollinators. Good for all ages. Usable anywhere plants are flowering.









Soup to nuts guides for building these kits can be found at SciStarter.org/librarybuild-a-kit

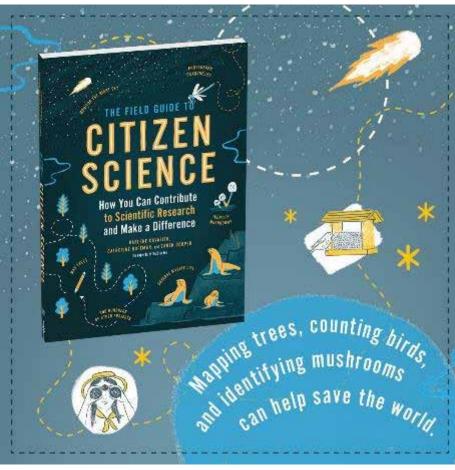




More ideas to participate in **Citizen Science**



Library centered citizen science project













Book discussions

Astronomy Program











Programs and events Bioblitz

Learn about Community Science

Book Lists & More Join the City Nature **Community Science** Challenge, April 29-Projects May 8 Participate in crowd sourced community Be a part of this science projects. community science itizen Science) happens when people com project by participating i onether to make observations, share informa this worldwide effort to and solve problems document the amazing biodiversity of our region. 0... **Local Community Science & Nature Events** loes the library have to do wit ity-based science? t is in each kit? check out a kit and how long ca





Join Today! SciStarter.org/library-network

Email:librarynetwork@scistarter.org















Leap into Science



Fc Ac ma De Se



Series of workshops that integrate open-ended science activities with children's books

- § For ages 3-10 and families
- § Accessible science topics and materials
- S Designed for community-based settings like museums, libraries, outof-school time programs

Leap.fi.edu

Why Science & Literacy

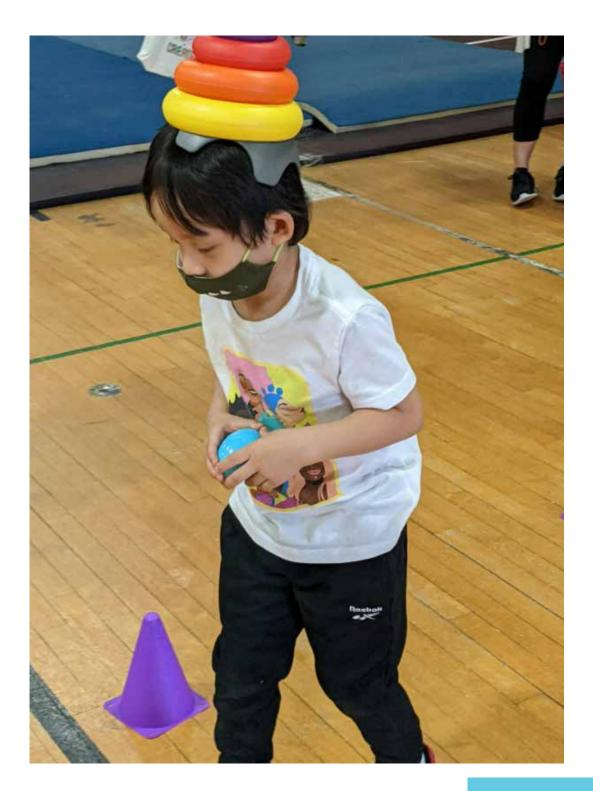


learning through reading and science explorations?



Type in the chat – what skills are children practicing when

Curriculum





Balance, Wind & Light and Shadow Workshops for PreK, Elementary and Family Workshops







Core Four Strategies for Maximizing Learning











Leap.fi.edu/resources

Goals for Children and Caregivers

Have fun learning together

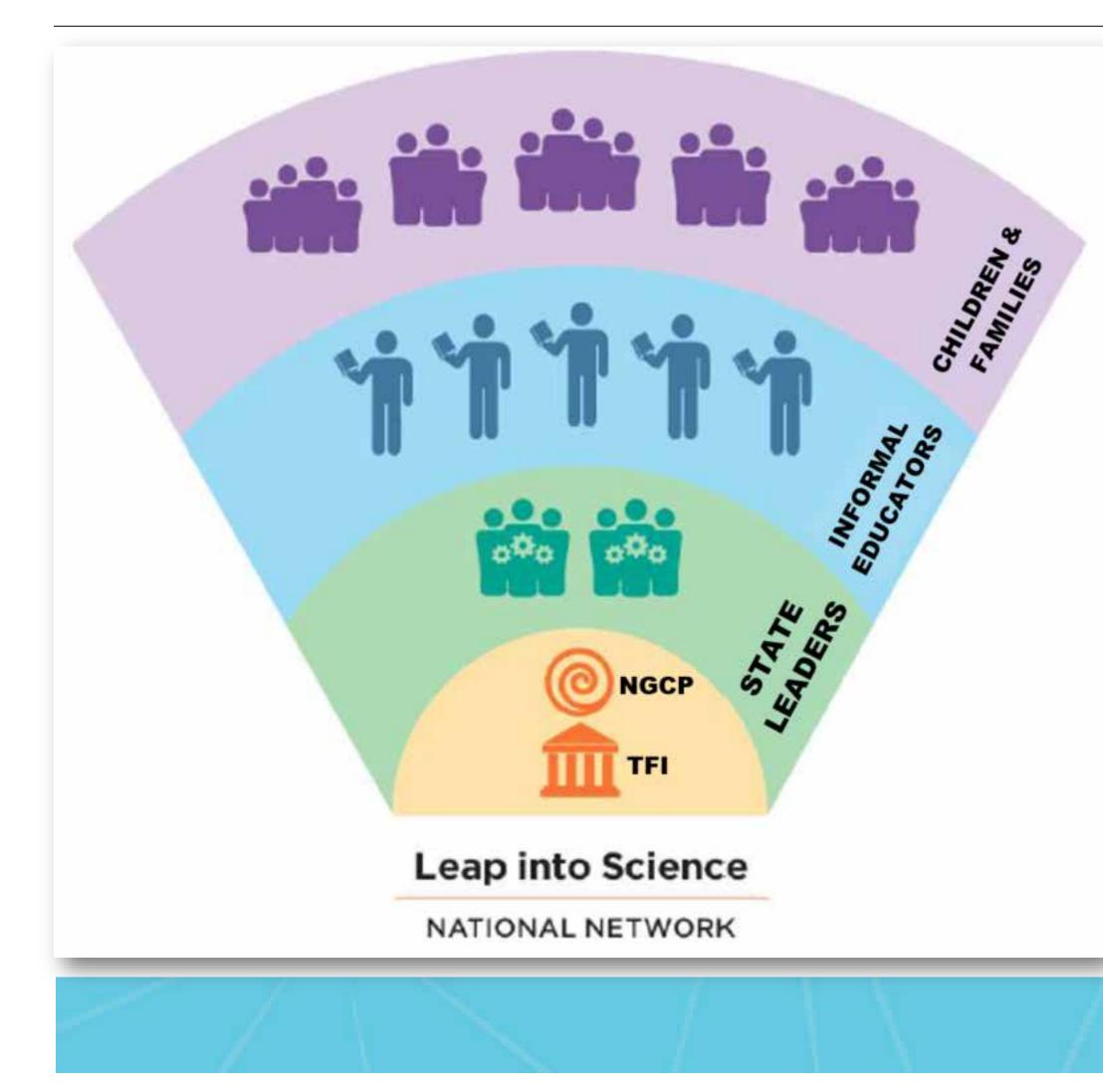
Not content mastery



Build critical thinking skills

Build positive attitudes towards science

Leap into Science National Network





- S A national network of informal educators who engage underserved urban & rural communities in science & literacy
- State-level interdisciplinary partnerships between museums, libraries, and OST organizations
- S Aiming for a sustainable trainthe-trainer model

Network Highlights

1,682 educators have been trained in the Leap into Science curriculum and facilitation strategies.

1606 Leap into Science workshops have been reported.

Over 30,000 children and families have attended workshops, although we estimate these numbers to be much larger.

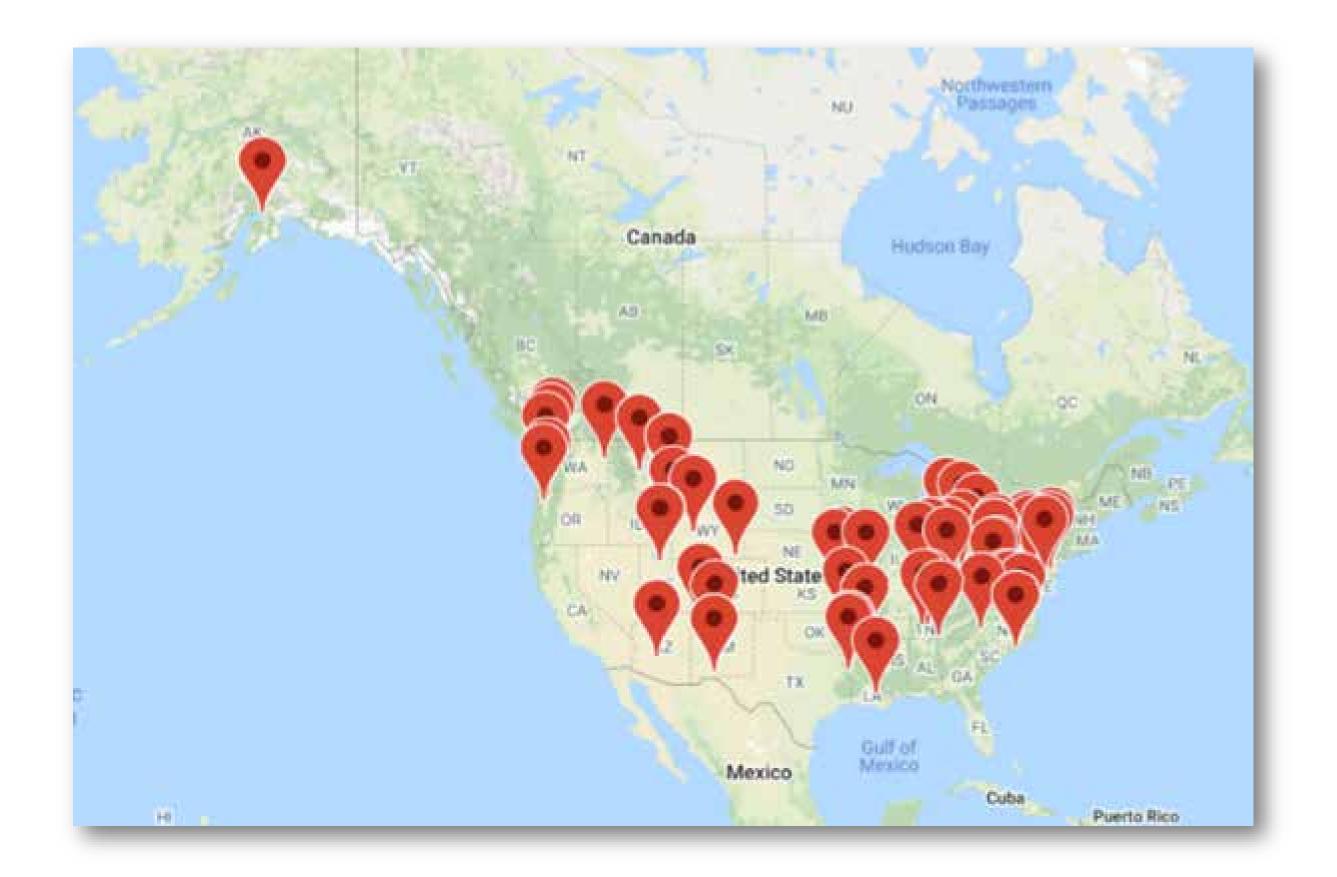


Photo by New Mexico Museum of Natural History and Science





Get involved!







Cohort 1	Cohort 2
Arizona	Indiana
New Jersey	Kansas/Missouri
Oregon	Pennsylvania
Tennessee	Utah
Washington	Wyoming
West Virginia	
Cohort 3	Cohort 4
Arkansas	Alaska
Louisiana	Michigan
North Carolina	Montana
Ohio	New Mexico





STEAM Resources for Libraries



We'll take questions from the chat and from people using the 'hand raise' function.



Upcoming NGCP Events

Webinar Series: Addressing STEM Stereotypes

Addressing STEM Stereotypes with Young Children June 1, 2022 at 11:00 AM Pacific / 2:00 PM Eastern

Addressing STEM Stereotypes with Youth and Young Adults June 7, 2022 at 11:00 AM Pacific / 2:00 PM Eastern







20 YEARS OF TRANSFORMING STEM

Learn more at ngcproject.org





