

NISE Network Online Workshop

Library Collaborations to Engage Local Public Audiences

May 19, 2026



Today's Presenters:

- **Anne Holland, PhD**, Director of Education and Learning Research, Space Science Institute, Manager: STAR Library Education Network; PI: NASA@ My Library, Boulder, CO
- **Vivienne Byrd**, Librarian, Program Lead on STEM/STEAM & Neighborhood Science Initiatives, Los Angeles Public Library, Los Angeles, CA
- **Annie Gordon**, Education Program Coordinator, Sciencenter, Ithaca, NY



Welcome! As we wait to get started with today's discussion, please...

Introduce yourself! Type your name, institution, and location into the [Chat Box](#)

Questions? Feel free to type your questions into the [Chat Box](#) at any time throughout the webinar. A selection of questions from the chat and workshop registration will be read aloud by moderators for presenters to answer during the Q&A.

See you next time!

Upcoming Online Workshops...

Tuesdays; 2pm-3pm Eastern / 11am-
12pm Pacific

- **June 9th:** America at 250 - Just in time resources you can use at science centers and children's museums



Learn more and register at nisenet.org/events

Agenda

- **Anne Holland**, Space Science Institute
 - STAR Library Network (STAR Net), Science Across America
- **Vivienne Byrd**, Los Angeles Public Library, CA
 - STEM programs and partnerships with GLOBE Observer, citizen science programs, Neighborhood Science School Visit
- **Annie Gordon**, Sciencenter, Ithaca, NY
 - Partnerships with Finger Lakes Library System and Tompkins County Public Library

Anne Holland PhD

Director of Education and Learning Research

Space Science Institute

NASA@ My Library

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Science-Technology Activities &
Resources For Libraries

To receive our newsletters:
<https://www.starnetlibraries.org/register/>


- Free activities and resources for libraries at clearinghouse.starnetlibraries.org
- Exhibit tours
- Kit opportunities
- Event support (summer learning, etc.)
- Activities supporting America's 250th anniversary

Why Libraries?




- Over 17,000 public library locations (more than individual McDonald's or Starbucks)
- Located in every community
- 70% of people walk in once a year
- Look like the community they serve
- Library staff have autonomy (especially at smaller branches) and are eager to try your ideas!

STAR Net STEM Activity Clearinghouse




In partnership with




STEM ACTIVITY
Clearinghouse


VIEWED ITEMS




Out and About
Patrons learn how to use field guides...



Dating Popcorn
Patrons simulate the geological...



Recipe for a Comet
Create a "comet" using dry ice and...




Browse and Filter All Activities

In the STEM Activity Clearinghouse, librarians and library staff can find high quality, vetted STEM activities that are appropriate for library use. STEM stands for Science, Technology, Engineering, and Math.


You can search by audience, content level, and difficulty, among others. You can also browse collections that we've curated just for you! Almost all the activities in the Clearinghouse have pictures or videos of real libraries doing these activities. Activities developed outside the STAR_Net Project will include tips and tricks for implementing in your library, and will link you back to the original source content so you can explore more.

FEATURED COLLECTIONS


[All Collections >](#)




Artificial Intelligence



We Are Water



Look Up! Explore Our Universe



Moon, Mars, and Beyond

Showing 1 - 7 of 7 items



Bird Scavenger Hunt

Participants learn about common local bird species by engaging in a scavenger hunt on a walk around the library grounds. This can be done as a facilitated program or provided as a handout for families to take home.

[Check It Out](#)

Content Area
Life Science

Age Group
Family
Pre-K
Early Elementary

Time to Complete Activity
40 minutes to 1 hour

Cost associated with Activity
Materials

\$0 ("found" items)

Difficulty Level (by content)
Medium



Should I Stay or Should I Go?

Through a series of stations, patrons will explore and compare the different survival strategies of seasonal birds vs. year-round residents.

[Check It Out](#)

Content Area
Life Science

Age Group
Family
Early Elementary
Upper Elementary
Twins (9-12)

Time to Complete Activity
40 minutes to 1 hour
Long Duration (days to months)

Cost associated with Activity
Materials

\$5-\$10

Difficulty Level (by content)
Easy

[Write a review](#)

[Tweet](#) [Share](#) [Pinterest](#)

[Send to a friend](#)

[Print](#)

Difficulty Level (by content)
Medium
Mass Level
Low

[Report a broken link](#)

[Categorized Incorrectly? Let us know!](#)

RELATED PROGRAMMING RESOURCES

Hints for uses in your library	If you are unable to go outside, consider printing out pictures of the different items on the scavenger hunt and displaying them around the library for families to find.
Related Links	Regional Bird ID Cards Flora, Fauna, Book List Making Windows "Bird Safe": FAQ and Poster
Originating Source	South of Science@ My Library
Related Books [Supports a book]	National Geographic, Little Kids First Board Book, Birds by Ruth A. Munro The Little Book of Backward Red Sonja by Andrea Pincoff and Carl Bookman How to Find a Bird by Jennifer Ward and Clara Barbela Hello, I'm Here! by Helen Frost and Rick Lieder A Beautiful House for Birds by Drake Liu The Birdwatchers by Simon James

REVIEWS

[Be the first to write your review!](#)



- Celebrating 250 years (+) of science in America
- Clearinghouse collection
- Free virtual programs through “Science by the Seat of your Pants”
- Digital map where you and your patrons/visitors can add scientific achievements from your state/territory
- Free physical map and stickers to celebrate local science
- Libraries (and science centers who participated in this webinar) can register to receive free materials here:



<https://www.surveymonkey.com/r/LC56BF3>

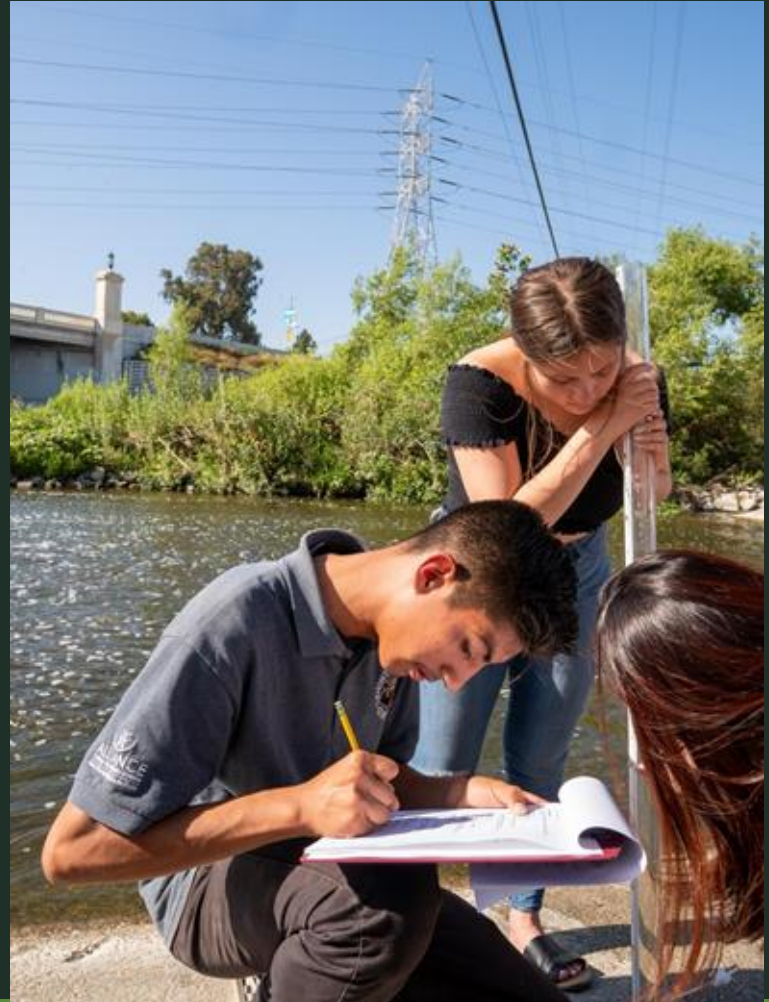
**Vivienne Byrd, Librarian,
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Neighborhood Science @ LAPL

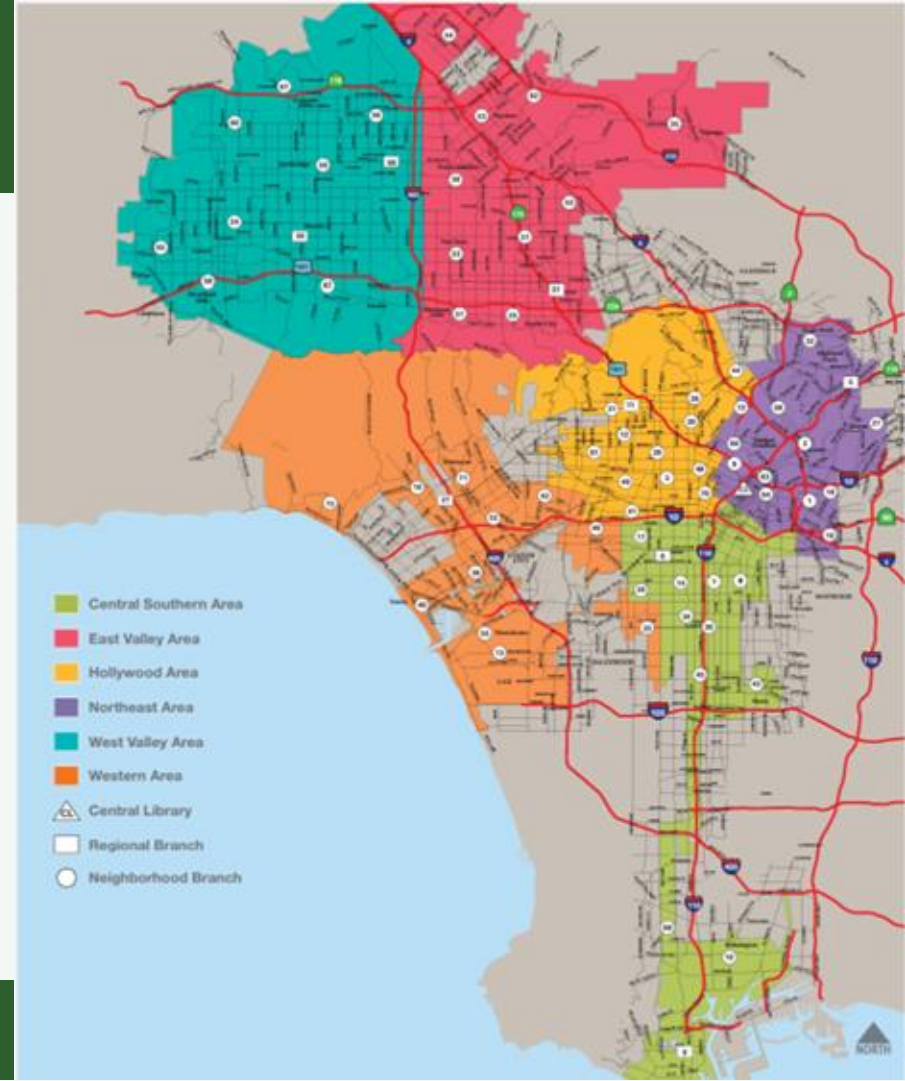
Harness the power of science for your neighborhood

Vivienne Byrd | Librarian III / STEAM & NeiSci Program Lead

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Los Angeles Public Library



73 Locations | City of 3.86 M | 185+ languages

What is Neighborhood Science (NeiSci)?

Also known as Citizen or Participatory Science

Public participation in real scientific research
— turning curiosity into action and impact.

Anyone can:

- Collect data
- Classify observations
- Interpret findings
- Contribute to real scientific research

Why "Neighborhood"?

Inclusive

No citizenship assumption

Place-based

Your air, water, your park

Empowering

Residents as experts

Accessible

Just curiosity + a smartphone



LAPL's Goal: Empower every resident to understand and investigate their own environment

Why It Matters: Science as Community Empowerment

Health & Safety

Residents monitor their own air & water

Data informs community health decisions

Empowers residents to advocate for themselves

Scientific Impact

Every observation = data real researchers use

NASA, EPA & universities use this data

LA residents contribute to global databases

Equity & Inclusion

No STEM background required

Multilingual materials & inclusive design

Libraries as trusted, neutral civic spaces

"Every data point is a resident's voice — contributing to science that improves their own neighborhood."

7 Environmental Topics — Real Research, Real Impact

Cloud Observation

NASA GLOBE Observer – atmospheric research on changing climate impact

Water Quality

Crow the Tap + TDS/EC/pH

Air Quality

AirBeam3 sensors monitoring PM 2.5, PM 1 and PM 10, relative humidity and air temperature on AirCasting App

Light Pollution

Globe at Night webapp

Biodiversity

iNaturalist app

Urban Heat Island & Trees

GLOBE Observer monitoring impact of land cover change and tree height

Mosquito Habitat Mapping

GLOBE Observer identifying and removing potential breeding site

All 7 topics aligned with Next Generation Science Standards (NGSS)

Pathway 1: DIY NeiSci Circulating Kits

Available at 38 LAPL branches — check out today

Each kit contains:

Scientific instruments + Classroom Curriculum materials

Classroom Curriculum Feature:

Lesson plan · short video · slide deck · NGSS activity sheets
Aligned to CA state science standards & local school district's Climate Literacy Resolution

Who it's for:

Parents, teachers, school librarians, families — anyone!

Educator support:

Video tutorials + 45-60 min Zoom/Meet office hours on request

39

LAPL branches

7

Kit topics



lapl.org/neisci/kits



The NeiSci Kit Collection — What's Inside?



Each kit: lesson plan · video · slide deck · NGSS activity sheets | lapl.org/neisci/kits

Pathway 2: School Visits + Community Outreach



SCHOOL VISITS

- We come to the school — library or multipurpose room
- Single class, multi-class, or multi-day options
- After visit: borrow Facilitator Program Box (1 month)



COMMUNITY OUTREACH

- Pop-up events: parks, community festivals, farmers markets
- Programs tailored to each neighborhood's priorities
- Families, seniors, and community groups welcome



Request a visit:

neisci.cc/visitmyschool

Lead time: 6–8 wks (single)
3–4 months (multi-day)

**ALL
MATERIALS
PROVIDED**

NGSS-aligned

Supports LAUSD
Climate Literacy
Resolution

**Schedule
fills FAST**

Meet communities where they are

Pathway 3: In-Branch Library Programs

Science programming inside LAPL branches — for everyone

FORMATS

- Drop-in programs open to all ages — no registration required
- Structured workshops (registration) for deeper engagement

HOW IT WORKS

- NeiSci team facilitates at some branches directly
- Trained branch librarians & staff run programs at others
- Scalable model — branches build capacity at their own pace
- Staff training provided by the NeiSci team before launch



Hands-on science

Real instruments from kits



Data collection

Live research platforms



Science identity

"I am a neighborhood scientist"

Citywide Campaign: LA Nature Quest



LA Nature Quest October 1–30

Annual citywide biodiversity challenge using the iNaturalist app

- Month-long observation challenge — citywide
- School campus bioblitzes
- Branch events throughout October
- iNaturalist data contributes to real species databases
- Turns the whole city into a living laboratory

Campaign Partners

LASAN

NHMLAC

LARAP

LADWP

Request school bioblitz visit: neisci.cc/visitmyschool | lapl.org/nature

Partnerships + The Library's Unique Role

Key NeiSci Partners

- ▶ NASA GLOBE Program & GLOBE Observer
- ▶ UCLA & USC — subject matter experts
- ▶ Natural History Museum of LA County
- ▶ LA Sanitation · LA Rec & Parks · LADWP
- ▶ EPA, TreePeople, Climate Resolve
- ▶ SciStarter — National Library Network
- ▶ LAUSD (Family Academy, schools)
- ▶ Mayor's Office of Sustainability



Why Libraries?

Trusted community hubs

Residents already come to us

Free & accessible

No barriers to entry

Built infrastructure

Cataloging + lending = perfect for kits

Neutral civic space

No political or commercial agenda

Multilingual reach

Diverse communities served

School connections

Outreach pathways already built in

Thank You!

*"You don't need a lab coat.
Just curiosity, a smart device, and a library card."*



Contact

Vivienne Byrd
vbyrd@lapl.org



Resources

- ▶ Kits & curriculum: lapl.org/neisci/kits
- ▶ LA Nature Quest: lapl.org/nature
- ▶ NeiSci Kit Video Tutorials: neisci.cc/kittutorial
- ▶ SciStarter Library Network: pages.scistarter.org/library/
- ▶ SciStarter Kit Building Guides: scistarter.org/library-build-a-kit
- ▶ LAPL NeiSci home: lapl.org/neisci

**Annie Gordon,
Education Program Coordinator,
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Sciencenter



- Located in Ithaca, NY (central NY)
- City of 30k
- Frequently reach children and families within 50 miles



Partnership with Finger Lakes Library System



Ongoing Collaboration

- Supporting programming librarians
 - Confidence in STEM, accessing materials
- Creating STEM kits for libraries
- Developing relationships with individual libraries within the system

Supporting Summer Reading

Outreach programming

Educator led programs for a fee

- Animal Shows
- Dry Ice Shows
- Bee Bots Coding Workshop
- Owl Pellet Dissection Workshop



Kit Development and Dispersal

Informed by Librarians

- For system and for individual libraries
 - Customize STAR Net for Ithaca
 - Curate NISE Net Activities
 - Prototype new (or expensive) materials



Connecting with Libraries

Deeper partnerships with individuals

- Bringing librarians in on community support programs
- Library passes to the museum
- Professional development opportunities



Resources, Reminders and Q&A

NISE Network Related Resources

- Library collaboration resources, Storytelling & STEM
nisenet.org/books
- Collaborations
nisenet.org/collaborations
- Early Learners
nisenet.org/earlylearners
- Citizen Science
nisenet.org/citizenscience
- Browse by Topic
nisenet.org/browse-topic



Resources & Opportunities



Learn more and access the NISE Network's online digital resources
nisenet.org/browse-topic



Read our monthly newsletter
nisenet.org/newsletter



Past Recordings of Online Workshops
nisenet.org/online-workshop-recordings

Follow NISE Net on social networking
nisenet.org/social



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Thank You



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ASU Center for Innovation in
Informal STEM Learning
Arizona State University

NISE
NATIONAL INFORMAL
STEM EDUCATION
NETWORK