NASA@ My Library

With funding from the NASA Science Mission Directorate's Science Activation program, the Space Science Institute launched *NASA@ My Library* in 2016 to help public libraries increase NASA and STEM learning opportunities for library patrons throughout the U.S.

Summative Evaluations Executive Summary

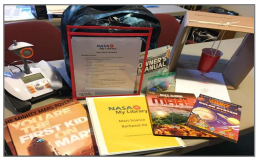
NASA@ My Library provided a wide range of supports from 2016-2024:

Built the Capacity of Public Libraries and Library Staff

Public libraries around the U.S. received in-person and virtual professional development, resources to use in library programming (including kits with NASA and STEM hands-on materials, activities, and digital learning tools), circulating backpacks (for patrons to check out and use at home), a Community Dialogue Guide to help partner libraries identify ways to engage their community in STEM, and a virtual community of practice.

Distributed Science Kits to State Public Libraries

State Library Agencies (SLAs) received virtual professional development and kits, which included scientific tools, books, and activity guides. SLAs made these kits available for check-out to public libraries within their state.



Prepared Scientists to Engage with Public Audiences

NASA-funded scientists (Subject Matter Experts, or SMEs) and near-peer university student SMEs were trained to facilitate in-person or virtual programs for public library patrons.

Co-Developed Activities with Library Staff

Public library staff and staff from State Library Agencies served as co-developers, mentors, and advisors. They participated in affinity group meetings and conversations with partner libraries, presented at webinars, and contributed to the development of programming resources.

Promoted Major Space Science Events to the Public

NASA@ My Library promoted major Earth and space science events like the 2017 and 2024 total solar eclipses through professional development opportunities, hands-on activities, and kit distribution.

Evaluating the Impact of NASA@ My Library

An evaluation team from Education Development Center (EDC) investigated the implementation of NASA@ My Library and its outcomes. Tools included pre- and post-surveys of library staff; interviews and focus groups with library staff; surveys and interviews with patrons; observations of library programs; surveys of scientists trained to work with libraries; focus groups with library mentors; and annual partner libraries' reports. Evaluation reports are available at https://informalscience.org/project/nasa-my-library/.

Reaching Public Library Patrons Around the U.S.

NASA@ My Library reached more than a quarter million patrons across the U.S. from 2016-2024 through in-person and online library programs, circulating science kits, and special space-science events (e.g., solar eclipse events). Patrons overwhelming reported that they enjoyed the NASA@ My Library programs, that they learned about NASA science, and wanted to learn more about earth science, space science, or engineering.

190
Public libraries

7,500+
Programs implemented

265,000+
Patrons reached

86%+
of patrons found the programs exciting

85%+
of patrons said they learned a lot about earth science, space science, and engineering

74%+
of patrons said NASA@ My Library programs made them interested in looking for information about NASA science or careers

"We received many positive compliments from our participants. One of the best ones was a little boy who was so intrigued by the UV beads and flashlight. He kept coming back and coming back to play with the beads. Afterward, he came up to a staff member and said, 'I guess I made my decision. I'm just going to have to be a scientist when I grow up!'"

~Public Library Staff

NASA@ My Library helped reach new audiences who had never been to STEM programs

46%
of patrons who attended NASA@ My Library programs said they had never attended a program about Earth or space science before

"When we had our program with the NASA engineer, kids were able to get up and ask lots of questions. I had one girl who was about 12 get up and say, 'I love math. What jobs do you think would be good for me?' Our engineer that we were matched with was a female, and to hear a woman who had made it to that level talk to a young girl—at an age when many girls start to fall away from the sciences—about her possibilities at NASA and encouraging her to keep her love of math alive, was just special."

~Public Library Staff

Partnering With State Libraries to Increase Reach

The project partnered with State Library Agencies (SLAs) to reach more libraries. Beginning in 2018, 18 SLAs received training and were provided with two earth and space science kits which they promoted and circulated to public libraries in their states. The kits were used by public libraries to facilitate program for their patrons.

NASA@ My Library → **18** SLAs circulated kits → **672** Public libraries used kits to facilitate programs → **16,000+** Patrons reached

100%
SLA staff increased their confidence in, knowledge about, and interest in supporting Early and space

100%
SLAs felt the kits were a good fit for libraries in their state

89%
SLAs plan to continue circulating kits

61%
SLAs plan to create additional kits

89%
Library staff interested in additional kits like these

91%
Library staff felt patrons enjoyed the program facilitated using the kit

"The fact that everything was there and ready to go and some of the activities basically had a script, lessened the anxiety for library staff because they knew it was coming from a trusted source and they could just follow the instructions provided."

~SLA Staff

"If the goal is to get activities out in the public libraries, I think that having the kits to build off of and the money to replicate those were extremely important."

~SLA Staff

"One elementary school girl became very excited when I spoke to her about space during the program. She enjoyed the conversation so much she immediately started looking at and checking out books about space to learn more. It was wonderful to see her enthusiasm!"

~Public Library Staff

What makes a kit effective?

- Program-in-a-box: scripts, supplies, and vetted activities
- Quick-start + unboxing support
- Tools appropriate for staff/patrons
- Bilingual materials + culturally relevant outreach examples
- Clear logistics plan for circulation, replenishment, and equipment

Kit 1: Sun Earth-Moon Connections

Building the Capacity of Public Libraries & Library Staff

A major NASA@ My Library strategy was to provide NASA SMD resources to public libraries. Across both phases, NASA@ My Library built library staff capacity through a combination of professional development, ready-to-use resources, and continuing support that increased staff confidence and made STEM programming more feasible to sustain. Near the end of the project, three librarians from partner libraries served as project to help develop additional resources.

Across all phases of the project, library staff reported that *NASA@ My Library* **increased their interest, confidence, and ability** to facilitate library programming related to Earth, space, and engineering.

Phase 1 (2016-2020)

71%

Partner libraries increased the amount of STEM programming they offer

92%

Library staff planned to continue using their kits

"This has been the most supportive grant community I've been part of. The initial trip to Denver, monthly calls…this is the kind of gold standard for support and resources."

~Public Library Staff

Phase 2 (2021-2023)

100%

All libraries said they were likely to continue offering Earth and space science programming

"We have been able to increase STEM programming at our library. Staff confidence in planning and presenting Earth and space science programs has increased, as has our desire to run those types of programs. We now have more resources to utilize and know where to find new ones."

~Public Library Staff

What supported library staff capacity building?

- "Programs in a box" reduced planning burden
- Combination of hands-on practice, in-person workshop, and ongoing support
- Opportunities to learn from peers, mentor libraries, and the project team
- Flexibility and adaptability of activities and resources

Capacity building through engaging librarians as project advisors

Advisor librarians:

- Had an opportunity to expand the types of STEM-related programming and activities they offer
- Appreciated the diverse perspectives involved in the co-development process and the ability to work with other librarians
- Gained confidence and shared their experiences with colleagues and other partners