

Engaging the Public in Community Science: Adaptations and Lessons from COVID-19

Theresa Schwerin, NASA Earth Science Education Collaborative, Institute for Global Environmental Strategies
Vivienne Byrd, Los Angeles Public Library

GLOBE Observer: Science in the Palm of Your Hand



The NASA Earth Science Education Collaborative ([NESEC](#)) is enabling broad participation in NASA Earth Science, including citizen science as part of the international GLOBE Program. Using the free [GLOBE Observer mobile app](#), volunteers contribute to monitoring clouds, water (as a habitat for mosquitoes), plants (trees and other land cover), and help identify change over time. These openly available data can be used to help interpret and augment NASA satellite data.

Community building through partnerships with informal science education organizations has been a significant focus for NESEC, including libraries, camps, parks, and scouts.

Library programs using GLOBE Observer citizen science and activities have targeted all ages (children, families, teens, adults), formats (story time, hands-on activities, nature walks, science clubs, book clubs, etc.) and settings (e.g., inside the library, outdoors, online).

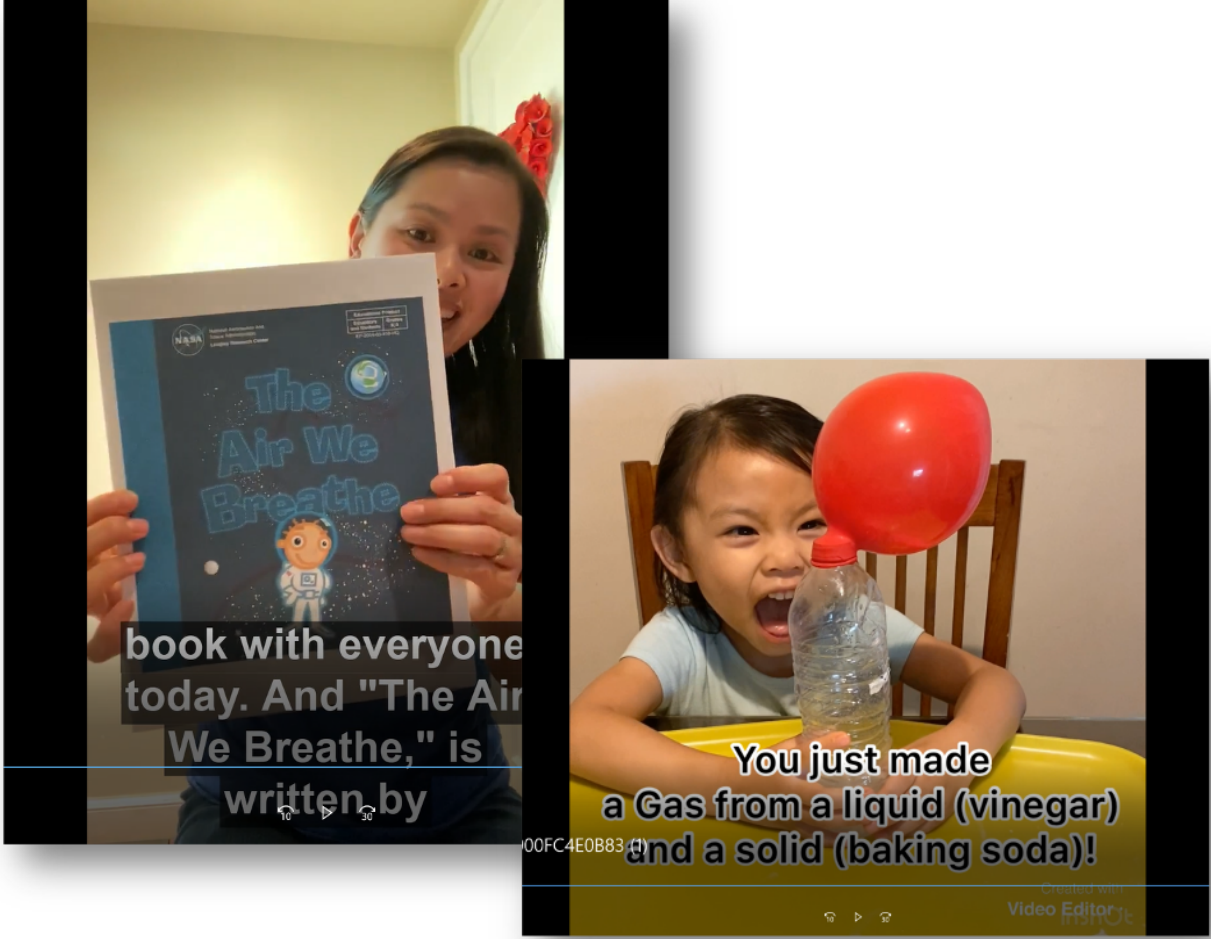
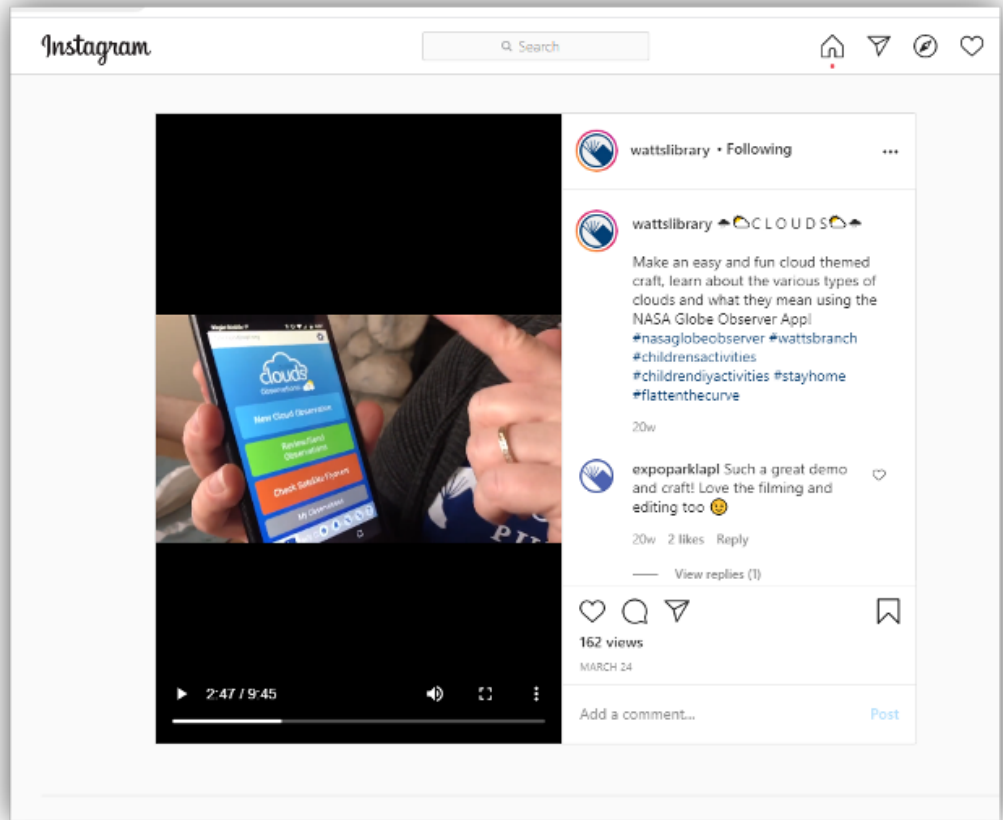


Adapting Neighborhood Science to COVID

Los Angeles Public Library (LAPL) is a GLOBE Partner, and a key collaborator with NESEC. The library's [Neighborhood Science Program](#) (NeiSci) has engaged its communities through free in-person workshops and events at library branches; patrons could also borrow [DIY kits](#) circulating citizen science kit from participating library branches. Photos show examples of NeiSci programs in a pre-COVID world and adaptations to continue engagement virtually.



Pre-COVID programs included those inside the library building, outdoors, and DIY circulating kits for bringing science home. Shown above is the GLOBE Mosquito Habitat Mapper kit. *Photos from Los Angeles Public Library.*



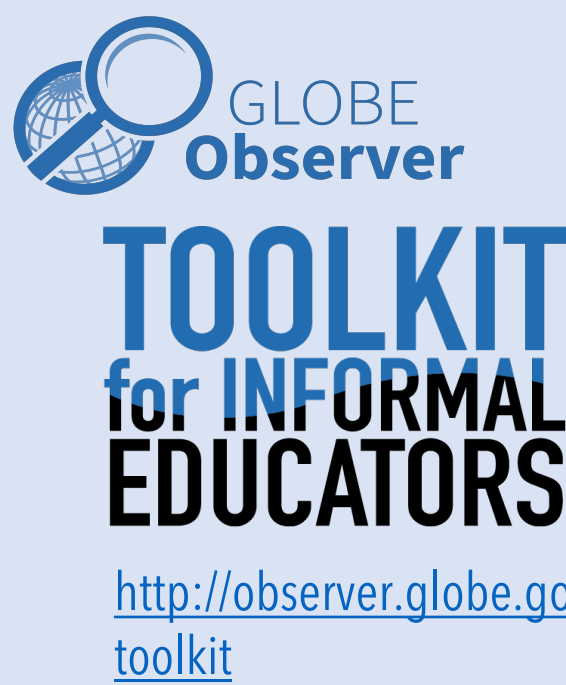
Adapting programs for remote learning

(above and left) required going virtual, including story time on social media, streaming video demonstrations of hands-on activities to do at home, and "grab-and-go" summer kits for curbside pickup. Printed materials are particularly important to households with limited access to Internet and printers.

Going virtual brought new opportunities

- Broadened audience beyond local communities.
- Opened access to much broader expertise, as a result of not having to travel to the library for a live program.
- Increased parent and intergenerational participation.
- Enhanced school curriculum (LAPL works with Los Angeles Unified School District).
- Increased participants' willingness to search for and try out other citizen science projects.
- Increased patrons' willingness to turn their smart device into an effective scientific device.

Citizen Science Resources for your Library



<https://scistarter.org/library-network>



Be prepared for the **2022 summer learning event** with STARnet Libraries and *Our Blue Planet Earth*
<http://www.starnetlibraries.org/our-planet-earth/>