



Girl Scouts and GLOBE Observer

Think Like a Citizen Science Journey

Case Study: Pivoting to Virtual for COVID-19



During 2020, the COVID-19 pandemic caused many people to stay home from school, work, and afterschool activities, like Girl Scouts. While people were increasingly spending more time at home, they were looking for programs to engage young people that could be done virtually.

In response to the pandemic, GLOBE Observer reached out to different Girl Scout Councils throughout the United States. The first group that GLOBE Observer worked with was the Girl Scouts of South Carolina – Mountains to Midlands. This council was one of the first to adapt their virtual programming to a national audience early in the pandemic, just as many schools were closing and instruction from schools had not yet become virtual.

In March of 2020 GLOBE Observer worked with the Girl Scouts of South Carolina – Mountains to Midlands as part of the Space Science Master Badge. As part of the requirements for this badge Girl Scouts learn about different careers at NASA. GLOBE Observer used this opportunity to engage Girl Scouts in not only careers at NASA, but also to teach them that they do not need to wait until they are adults to be involved with research at NASA through citizen science projects. 132 Girl Scouts registered, but over 3,700 Girl Scouts clicked the link to attend.

In April through May 2020, GLOBE Observer focused on creating virtual programming surrounding the Think Like a Citizen Scientist Journey that was tool specific. For these first programs, the Clouds tool was chosen to be the focus. The Journey consists of six meetings that have specific themes and learning objectives, which align with the scientific method. The program that was created was intended to satisfy the requirements of the first two meetings and to teach the girls about the requirements for the following 4 meetings, that they would do on their own.

Journeys are more intensive and require more work than badges at each level (Daisy, Brownie, Junior, Cadette, Ambassador) in Girl Scouts. While a badge can be earned in one to two meetings, journeys require six.

The first virtual program, *Think Like a Citizen Scientist Journey: GLOBE Observer Clouds*, ran on April 2, 2020 with the Girl Scouts of Southern Alabama where 130 Girl Scouts Registered. On April 9, 2020, the same program was run with the Girl Scouts of Central Texas, where 467 Girl Scouts registered. On May 31, 2020, the Girl Scouts of Diamonds of Arkansas, Oklahoma, and Texas hosted this same program for their council. Thirty-nine Girl Scouts registered.

With the knowledge that the program was working for the Clouds tool, GLOBE Observer began planning programs for the other tools for the Think Like a Citizen Scientist Journey. Girl Scouts of Oregon and Southwest Oregon partnered with GLOBE Observer to create programming for the Think Like a Citizen Scientist Journey for each GLOBE Observer tool: Clouds, Trees, Land Cover, and Mosquito Habitat Mapper. Because Girl Scouts is a girl led program, having

different focus options for Girls Scouts to choose to attend based on their interests is important.

In each program Girl Scouts were instructed on what an observation is, why collecting data is important, and what it means to analyze data. Then Girl Scouts were introduced to the GLOBE Observer tool that was the focus of each program. The first program launched in January 2021 and was centered around the Clouds tool. Eighty-five Girl Scouts registered. The program director for Girl Scouts of Oregon and Southwest Washington remarked that it was the “most engaged she’d seen kids in a virtual program.” In February 2021, twenty-five Girl Scouts registered to learn about the Land Cover tool. In March 2021, as part of the 2021 Trees Challenge, we hosted a program introducing the Girl Scouts to the Trees tool. Forty-one Girl Scouts registered. In April 2021, as students in the community started returning to hybrid instruction, registration decreased. Five Girl Scouts registered for the Mosquito Habitat Mapper program that ran that month.

While the Mosquito Habitat Mapper was one of the least attended, it received praise from one budding entomologist.

“We wanted to thank you and Dr. Low for the wonderful GSA (Girl Scouts of America) Mosquito Habitat Mapper program. My daughter wants to be an entomologist and was so excited to take part. She absolutely loved it!!! I've now downloaded the Mapper and she is so proud that she will get to be 'doing science' like grown-ups from now on. I've also downloaded the Mission Mosquito Science Notebook for her and she is thrilled to start on that. She had been a little disappointed with some of the other GSA activities bug-related activities, because they generally were very light on the science and focused a lot on an art activity. She loves art, but she really, really loves studying actual bugs and getting to make the mosquito trap, which she now checks on every day, was perfect! She was so proud to get to talk to Dr. Low and actually learn more about studying insects in real life.

This case study shows a point in time when the public was pivoting in how they provide programs for their communities. GLOBE Observer was ready to provide programming to serve the Girl Scout community.

However, as vaccinations became increasingly available and Girl Scout programming became increasingly more in-person, the GLOBE Observer team used the products created for the program series run through the Girl Scouts of Oregon and Southwest Washington to create stand-alone products that could be used by councils and troops to run their own programs. Since each council or troop may have specific needs for their audiences, a toolkit was created to support troop leaders and volunteers as they run their own programs. The toolkit consists of a slide deck and suggested script that can be adapted and used by leaders and volunteers. Additionally, a video for each tool (Clouds, Trees, Land Cover, Mosquito Habitat Mapper) was produced to serve as a plug-and-play to be used with Girl Scouts directly or as a training video for troop leaders or volunteers as an example of how to run their program.

Learn more and access the guides on the [Girl Scouts Guides page](#) on the GLOBE Observer website (observer.globe.gov/girl-scouts).