

A multiplatform project designed to improve the **environmental and scientific literacy** of children and their families.

The centerpiece is an animated television series, along with live-action videos, an immersive Web experience, and a grassroots outreach initiative that will all work together to help children see the world in a new way and deepen their understanding of the science underlying sustainability.

The LOOP Curriculum

Innovative curriculum goes beyond

the 3 Rs-reduce, reuse, recycle.

Understanding Ecosystems

Exploring Science Concepts

Investigating Ecosystems

Connecting to Nature

Four strands:

PI: Marisa Wolsky, WGBH Educational Foundation; Co-PI: Kate Taylor, WGBH Educational Foundation NSF Award Number: 1010959

Target Audience:

Children ages 4 to 8, their families, and informal educators

Need

- Children's low level of environmental literacy
- Children's growing alienation from the natural world
- Absence of informal educational media designed to teach elementary-age kids the science underlying sustainability

The LOOP Experience & Deliverables

- Kids will watch LOOP on TV:

 30-episode, animated series
 about four kids who are transported
 into a video game and solve
 challenges set in rich ecosystem
 Worlds (Desert, Water, Mountain,
 Jungle, City). Each episode is
 followed by a live-action video
 featuring real kids investigating and
 sustaining their local ecosystems.
- Kids will play LOOP online:
 24/7 immersive online game
 where kids explore the natural world and complete virtual missions.
- Kids will investigate LOOP:
 Hands-on science activities that
 challenge kids to go outdoors,
 explore nature, and report their
 findings online.
- Kids will document LOOP:
 A mobile app that prompts kids to record their activities, take photos, collect data, and send information back to the site.

Intended Impacts

- (1) Teach the science concepts and model the scientific habits of mind required to understand and investigate the systems underlying sustainability.
- (2) Demonstrate how the LOOP multiplatform project can be used to connect children and their families to the natural world.
- (3) Meet the national call to deliver educational media to elementaryage children that increases their understanding of science and sustainability issues.

Reaching Diverse Audiences

By partnering with these reputable and established groups (who will also advise us on the development of all our materials), LOOP will enhance its impact by greatly extending its reach, especially into diverse and underserved communities. LOOP, in turn, will provide these partners with sought-after, novel ways to connect to their constituents with STEM resources:

- U.S. Forest Service
- Children and Nature Network
- National Recreation and Park Association
- American Camp Association
- National Summer Learning Association
- Boys and Girls Clubs of America

Formative Evaluation Results

Evaluation of a pilot animatic conducted by Concord Evaluation Group, LLC has shown that LOOP is meeting its educational goals and has very high appeal across gender, age, socioeconomic status, ethnicity, race, and setting (urban, suburban, rural).

- Kids who watched LOOP demonstrated significantly better knowledge about specific science concepts than kids who did not.
- 91% of kids reported that they liked the episode and many watched it multiple times or invited other siblings or friends to join them in viewing it.

Seeking Connections

We would like to connect with media and Web producers and informal science organizations targeting elementary-age children and their families with sustainability content, including citizen science organizations, youth-serving organizations, museums, zoos, and aquariums.



