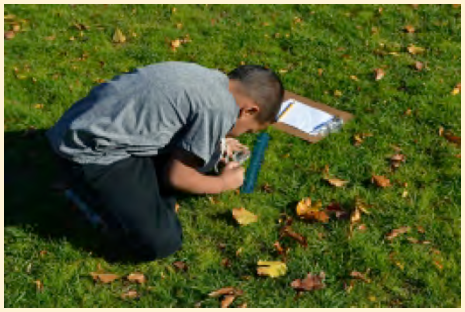
Partnering with Environmental Organizations and Schools



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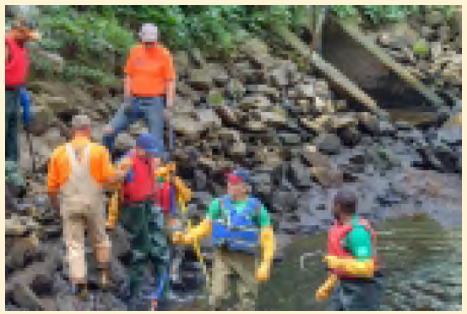
Conservation Program Coordinator
Providence Parks Urban Wildlife Refuge Partnership



Kassi Archambault
Education Director
Woonasquatucket River Watershed Council

Rachel Holbert,
Director of Education
Norman Bird Sanctuary

EPA United States Environmental Protection Agency

RHODE ISLAND RiEEA Environmental Education Association

Agenda

1. **Message** - My mission + your mission...Partnerships make us better together!
2. **Programming** - How to run quality programs in coordination with partners
3. **Reaching Out** - Connect and build relationships with schools & environmental education orgs
4. **Success Stories**
5. **Questions & Answers**

Message: Collaborators

- Sharing similar missions is key!
- Avoid “mission drift.”
- Partner with outside orgs.
- How does your mission overlap with that of other orgs?

EPA United States Environmental Protection Agency

Mission Based Amenities

WOONASQUATUCKET RIVER
WATERSHED COUNCIL

Public Parks don’t just “teach kids what’s out there,” but also expose them to solutions to current environmental issues.

Message: Teachers and Students

- Get children into outdoor learning spaces
- Outdoor experiences do not have to be complicated
- Create opportunities for teachers to become comfortable and confident
- Multidisciplinary

Message: Let learning standards be your draw

- Teachers appreciate help meeting learning standards!
- Dovetail your outdoor experience with classroom objectives
- **Next Generation Science Standards**:

https://www.nextgenscience.org/sites/default/files/AllTopic.pdf

K.Interdependent Relationships in Ecosystems: Animals, Plants, and Their Environment

K.Interdependent Relationships in Ecosystems: Animals, Plants, and Their Environment

Students who demonstrate understanding can:

K-LS1-1. **Use observations to describe patterns of what plants and animals (including humans) need to survive.** [Clarification Statement: Examples of patterns could include that animals need to take in food but plants do not; the different kinds of food needed by different types of animals; the requirement of plants to have light; and that all living things need water.]

K-ESS2-2. **Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.** [Clarification Statement: Examples of plants and animals changing their environment could include a squirrel digs in the ground to hide its food and tree roots can break concrete.]

K-ESS3-1. **Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.** [Clarification Statement: Examples of relationships could include that deer eat buds and leaves, therefore, they usually live in forested areas, and grasses need sunlight so they often grow in meadows. Plants, animals, and their surroundings make up a system.]

K-ESS3-3. **Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.*** [Clarification Statement: Examples of human impact on the land could include cutting trees to produce paper and using resources to produce bottles. Examples of solutions could include reusing paper and recycling cans and bottles.]

The performance expectations above were developed using the following elements from the NRC document *A Framework for K-12 Science Education*:

Science and Engineering Practices

Developing and Using Models

Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, or storyboard) that represent concrete events or design solutions.

- Use a model to represent relationships in the natural world. (K-ESS3-1)

Analyzing and Interpreting Data

Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations.

- Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions. (K-LS1-1)

Engaging in Argument from Evidence

Engaging in argument from evidence in K–2 builds on prior experiences and progresses to comparing ideas and representations about the natural and designed world(s).

- Construct an argument with evidence to support a claim. (K-ESS2-2)

Obtaining, Evaluating, and Communicating Information

Obtaining, evaluating, and communicating information in K–2 builds on prior experiences and uses observations and texts to communicate new information.

- Communicate solutions with others in oral and/or written forms using models and/or drawings that provide detail about scientific ideas. (K-ESS3-3)

Connections to Nature of Science

Scientific Knowledge is Based on Empirical Evidence

- Scientists look for patterns and order when making observations about the world. (K-LS1-1)

Disciplinary Core Ideas

LS1.C: Organization for Matter and Energy Flow in Organisms

- All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow. (K-LS1-1)

ESS2.E: Biogeology

- Plants and animals can change their environment. (K-ESS2-2)

ESS3.A: Natural Resources

- Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)

ESS3.C: Human Impacts on Earth Systems

- Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things. *(secondary to K-ESS2-2)*,(K-ESS3-3)

ETS1.B: Developing Possible Solutions

- Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people. *(secondary to K-ESS3-3)*

Crosscutting Concepts

Patterns

- Patterns in the natural and human designed world can be observed and used as evidence. (K-LS1-1)

Cause and Effect

- Events have causes that generate observable patterns. (K-ESS3-3)

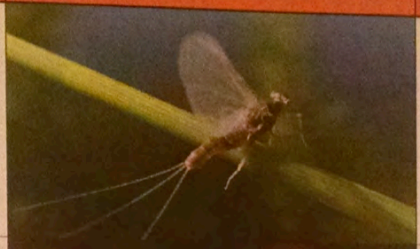
Systems and System Models

- Systems in the natural and designed world have parts that work together. (K-ESS2-2),(K-ESS3-1)

Programming: On-Site Events

- Partners or teachers can lead activities and bring volunteers
- Ask schools to bring lunches and snacks
- Invite community centers

Programming Events with help from Partners & Teachers

Macroinvertebrate	Looks like . . .	Represented by . . . (for example, beads, coins, paper clips)
Mayflies (Order *Ephemeroptera*)		

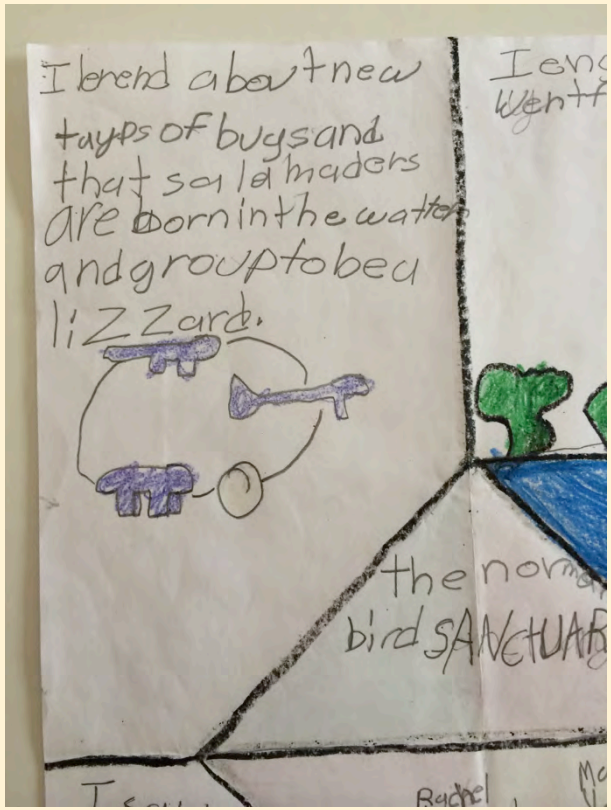
Programming: Field Trips & Site Visits

- Ask about standards, suggest activities
- Offer resources available
- Host trainings for proper land use
- Co-host programs (both with teachers and with other orgs.)

Reaching Out: Finding Potential Partners

- **Consider your subject**: is anyone else in the area already teaching about watersheds? Raingardens? Forest ecology?
- **Consider your strengths**: maybe you have access to land, but what would complete the picture?
- **Consider partners to compliment what you're trying to do:** reach out to an organization that might have educators available
- **Think about leveraging grants:** could you and a partner org be more successful securing funding together?

Reaching Out: Timeline



- Keep time on your side!
- **Developing new partnerships**...1 year
  - Keep grant deadlines in mind
- **Booking one-off programs**...5-6 months ahead
- **Spring** and **Fall** are busy at school and for EE orgs
- Use **Winter** to your advantage
- Schedule rain dates!
- Consider timing of follow-up activities (evaluation?)

Reaching Out: Connecting with School Administration

- Multiple connections are important
- Contact local school department for outreach
- Include administration in planning and culminating events

Working with Providence Public School Department

Office of Strategic Community Partnerships

- Contact the Director:

Jael.Lopes@ppsd.org

Four main steps for “Point of Entry”

1. School meets with potential partner
2. School provides technical assistance to point person
3. Memorandum of Understanding
4. School provide Support to partners.

Four partnership categories, four different processes: Coordination, Collaboration, Strategic Collaboration, Cross-Sector Collaboration

Providence Schools

https://www.providenceschools.org/Page/565

Reaching Out: Connecting with Schools and Principals

- Offer your program to principals
- Meet with interested teachers

Reaching Out: What to bring to an initial meeting?

Explain your program through...

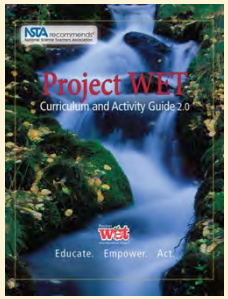
- Pictures
- Program outline- objectives & activities per lesson
- Timeline
- Short Video
- Teacher expectations

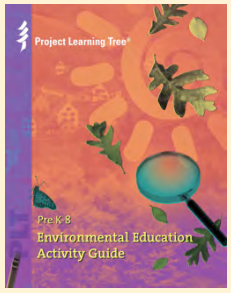
Reaching Out: What happens when you don’t connect?

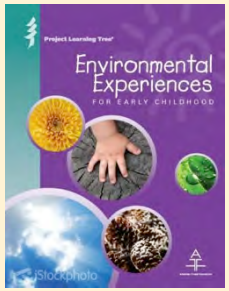
- Using this as a positive opportunity
- Evolve a program idea...is the audience looking for something else?
- Look for other collaborators, partners, or funding
- Consider it networking! Use connections to dive deeper in the community

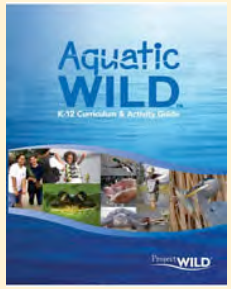
Reaching Out: Excellence in Environmental Ed

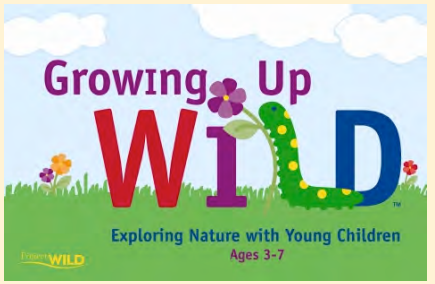
- Attend training for best practices
- Offer on-site training for teachers
- Be confident & open minded











Success Stories: What does collaboration look like?

OSEEC

Ocean State Environmental Education Collaborative

Ocean State Environmental Education Collaborative

- 4 EE partner orgs
- 1 school district, 2 elementary schools
- ~250 3rd graders in Central Falls
- 8 hours of classroom outreach
- 4 field trips
- Coordinated pre-/post-evaluation & grant writing
- Integrated curriculum among partners & schools

Success Stories

Success Stories

Success Stories

Partnership between Kassi and April reached….

- 2 Teachers - from Teacher Institute
- 7 Teachers - from Fish in the Classroom
- 230 Students - from Fish in the Classroom
- 2 Events - Fish Release Celebrations
- 8 Activities - at the 2 Events
- 5 Partnerships- Department of Environmental Management, The Met High School Students, Hispanic Access Foundation, 2 Schools

EPA United States Environmental Protection Agency

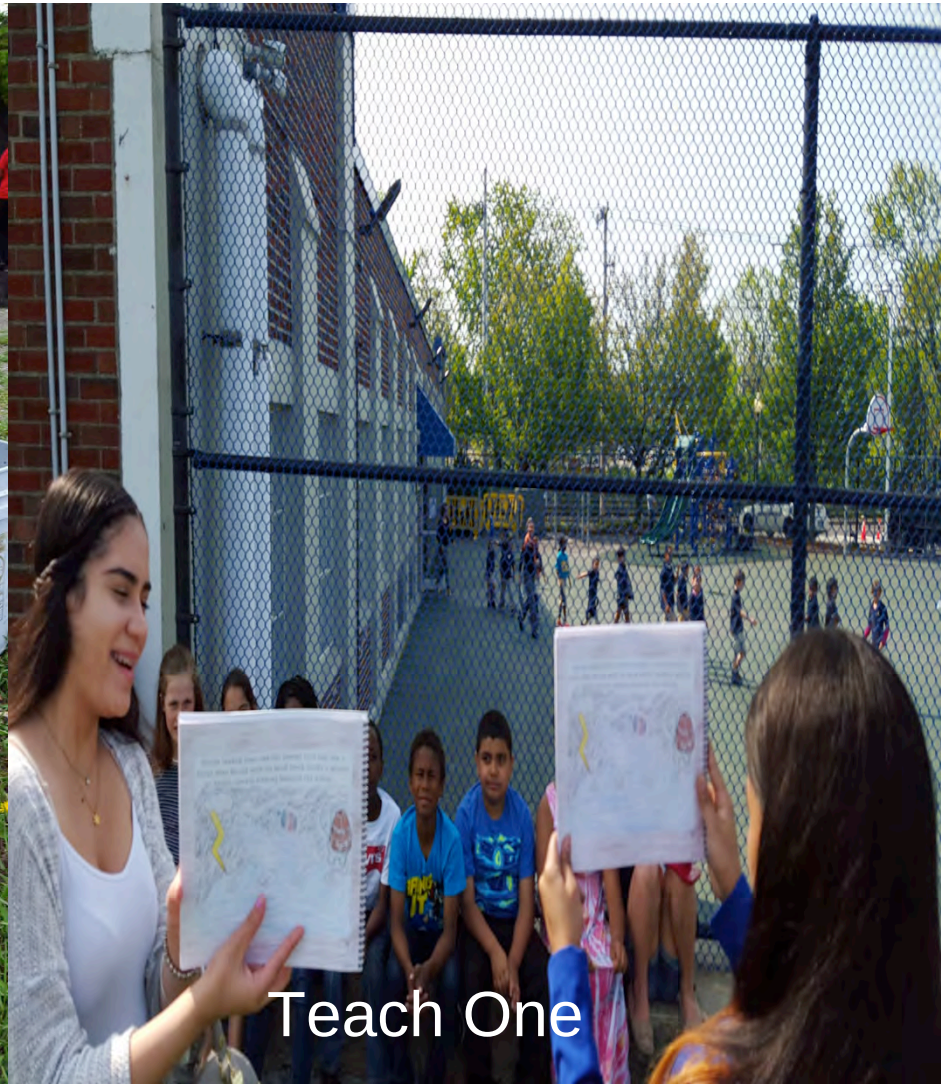
Success Stories: Long Term Programming

Two Examples:

- Growth from 1 teacher and 2 months, to stewardship projects, to 3 teachers and 7 months
- From a pilot project, to a year long program that the school partially funds


Learn One


Do One

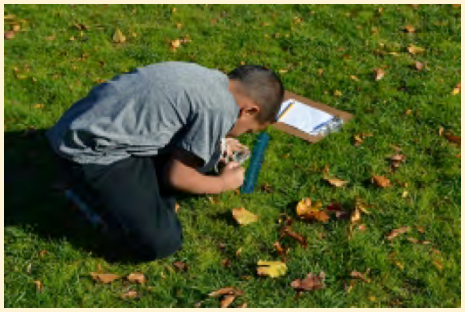

Teach One

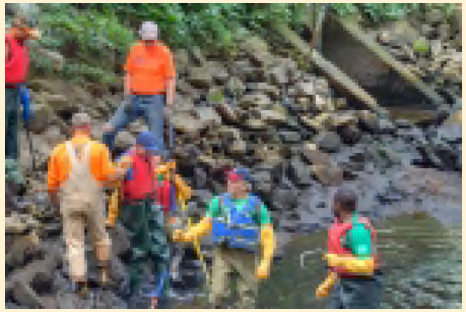
Advancing Environmental Education Through Collaboration

http://rieea.org

- Search the Member Directory...“I need help with a bird field trip!”
- Connect via social media to amplify your own programs (#RIEEAconnects)
- Professional Development Scholarships (50% up to $100)
- Events (Spring/Fall potlucks)
- Resources (links to free best practice guides, research & national EE community)

Thank you! Questions?





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Links to Resources

Next Generation Science Standards
https://www.nextgenscience.org/sites/default/files/AllTopic.pdf

RI Environmental Education Association
www.rieea.org

Providence Schools
https://www.providenceschools.org/Page/565

North American Association for Environmental Education
https://naaee.org/eepro/resources

Standards of Excellence for Outdoor Urban Education
www.fws.gov/urban

Trainings/Resource Guides:

http://projectwild.org/

http://www.projectwild.org/projectwildwebsite/aquatic/

https://www.plt.org/

http://www.projectwild.org/growingupwild.htm

http://flyingwild.org/

http://www.wetland.org/education_wow.htm

http://www.projectwet.org/