

Outreach at Field Stations: Best Practices for Engaging Participants



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SEPTEMBER 20, 2017

Introductions



- Who are we?

AND

- Why are we talking about outreach?

Workshop Agenda



- Overview and Introductions
- Goals for Outreach
- Design Cycle
- Outreach Types and Best Practices
- Wrap up

Introductions



- Who are you?
 - Name
 - Field station
 - Your role at your field station

Workshop Learning Outcomes



- Articulate the pedagogical value of their own and other's informal STEM programs.
- Identify achievable best practices for inclusive, engaging educational programs, by content and audience types.
- Formulate early stages of assessment plans for reporting and marketing.

Informal Needs Assessment



In your small groups:

- Summarize your station's outreach.
- What you **hope** to get out of this workshop?
- What you **need** to get out of this workshop?
- Please be prepared to share the themes that develop from your discussion.

Informal Needs Assessment



- **Hope**

- Sustainability – keep outreach going (\$)
- Getting scientists involved in citizen science projects
- Legal aspects – waivers for people not from the college
- Ideas for outreach
- Better targeted outreach to conserve resources
- How to reach diverse groups
- Resources and opportunities

- **Need**

- Ideas on how to make our 50th anniversary really special
- ID resources – how to get the \$\$
- Prioritize next best steps
- How to make outreach a priority for an institution focused on research

What is Outreach?



Guided tours, drop in visits, visitor center displays, and informational materials.

Participation in or leading programs that are not part of formal university coursework or research.

Informal education geared to K-12 students, families, the general public, and professionals.

Bringing learning experiences to individuals that cannot or would not seek those opportunities out on their own.

Educating the public about the environment.

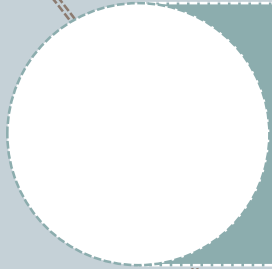
Outreach efforts advance participants' knowledge ... skills ... decision-making ...

Our Operational Definition of Outreach



Any effort by field stations to promote public awareness of STEM knowledge through informal education.

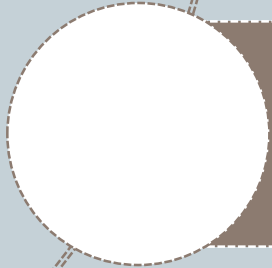
Outreach Goals



Our goal is to be known in the area and across the state as a great place to learn something new about the environment.



Provide age-appropriate field science programming, build strong community relations, and raise funds.



We do preK-12 field trips and in school programs, a college research program, and adult classes/seminars.

Outreach Goals



- What are the goals of your field station's outreach?
 - Take a few minutes to reflect and jot down ideas before sharing.

In your small groups:

- Share your ideas of outreach goals
- Please be prepared to share at least one goal from your group.

Outreach Goals



- Please be prepared to share at least one goal from your group.
 - To answer 3 questions: What do you do? Why does it matter? What's in it for me? ... How can I help?
 - Build a conversation with the public to engage with sustainability efforts
 - Incorporate the needs of the community and create ownership over the work of the field station
 - Engage community and create a sense of ownership of research to encourage donations
 - Engage with community to enhance accessibility of science and provide role models

Break



RETURN AT
2:35PM

Best Learning Experiences



In your small groups:

- Describe the best informal learning experience in your life.
- What were the factors that helped you learn or made it such a great experience?

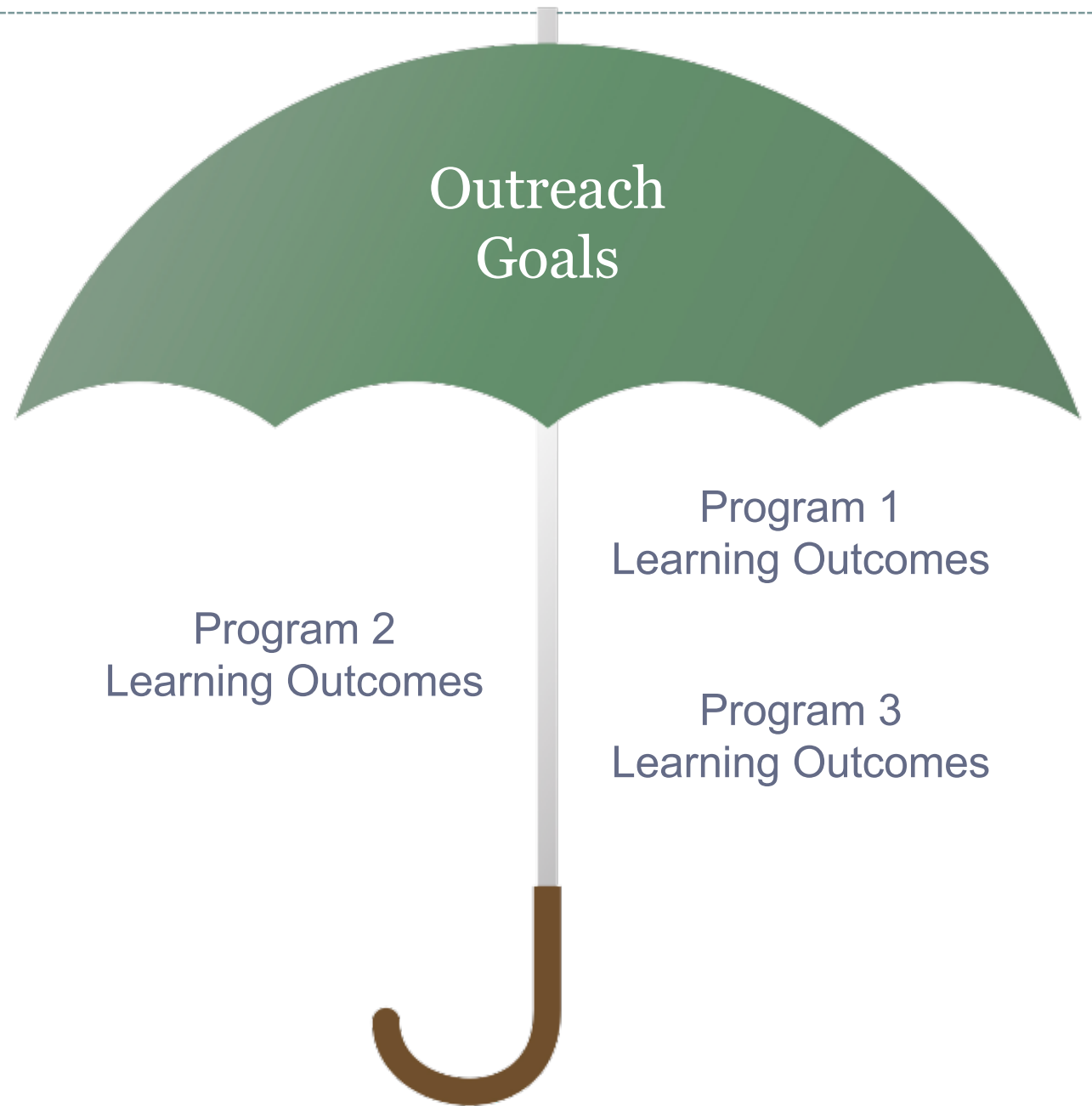
Best Learning Experiences



- What does good outreach look like?
- How would you recognize it if you saw it?
- What would the results or outcomes be?
- Does that affect your overarching field station goals?

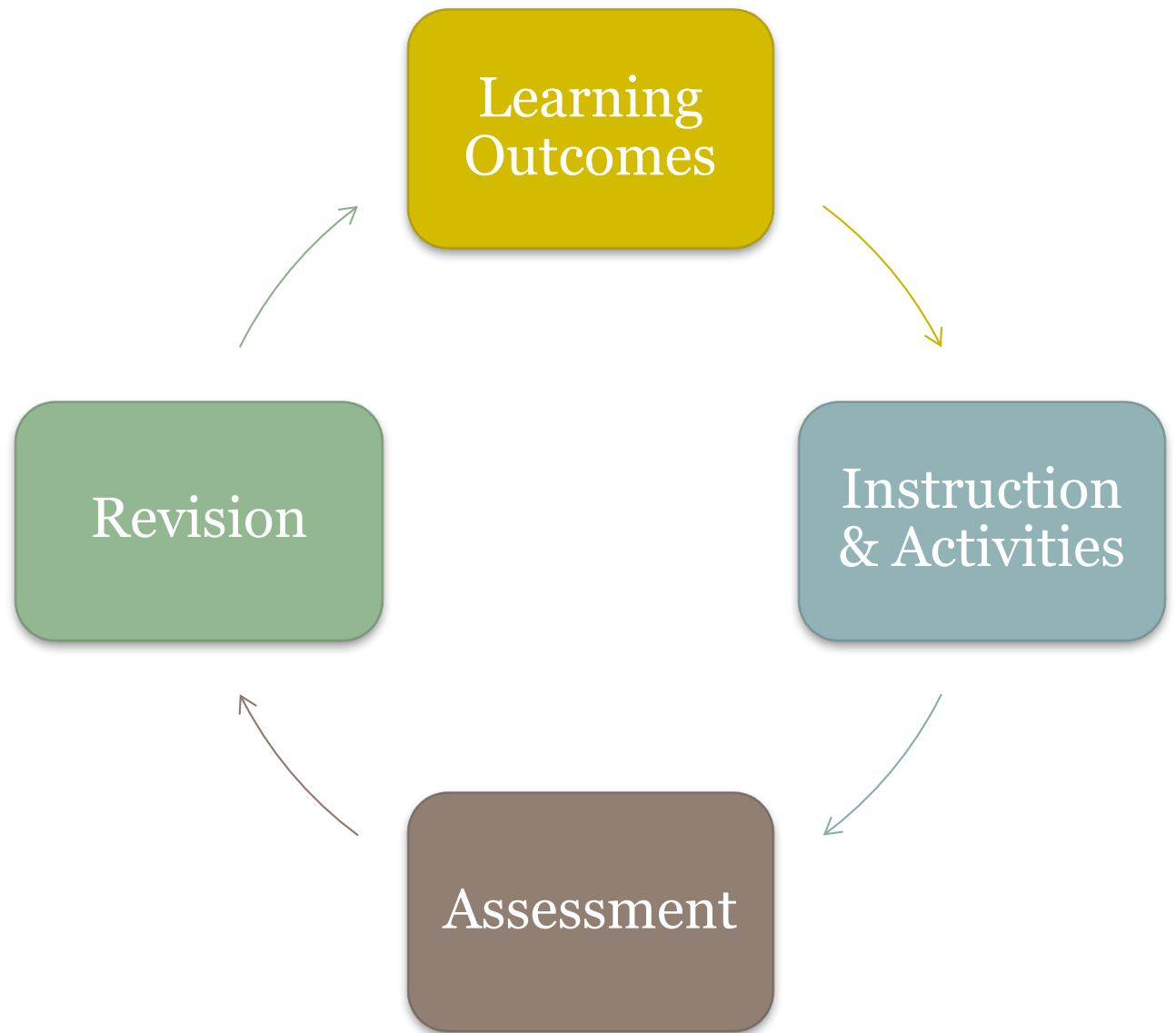
Outreach Goals

The outreach goals of the field station should broadly incorporate the learning outcomes of the specific programs.



Design Cycle

Use the cycle, to plan, implement, assess, and revise outreach activities, individually and collectively.



Learning Outcomes



- **Examples**



Recognize 6 species of animals found at the field station



Differentiate native and invasive species of plants



Investigate the effects of pollution on the watershed

- Given an outcome, what activity could support it?

Qualities of Effective Programming



- Engaging
- Inclusive
 - Free or inexpensive (remove resource barriers for participants)
 - No or minimal physical and language barriers
- Participants learn something
- What else?
 - Knowledge and skills to apply in other situations/contexts
 - Shareable

Assessment of Outreach



- **Assessment strategies**
 - For improvement and revision of programs
 - For reporting (to funders and other stakeholders)
 - For marketing
- **Discuss in small groups and be prepared to share with the whole group**
 - Types of assessment, data, and data collection
 - Tools for assessment (online, etc.)

Work on Your Handout



**WITH YOUR OWN FIELD STATION
OUTREACH AND PROGRAMS IN
MIND, WORK TO COMPLETE A ROW
OR TWO OF THE HANDOUT.**

Break



RETURN AT

Design Cycle Debrief



- How did it go with your handout?
- What was easy to complete?
- What was a struggle?
- How does the design cycle fit into your field station's outreach?
 - Both broadly and specifically

Best Practices



What are some examples of best practices for:

- Participant engagement?
- Inclusion (diversity)?
- Learning STEM knowledge and skills?

Achievable Best Practices



- Fulfills obligations to the general population
- Communication with potential participants
 - Think broadly/creatively about who might be interested
- Assess
 - For improvement and revision of programs
 - For reporting (to funders and other stakeholders)
 - For marketing

Revisit Outreach Goals



- Outreach goals vs program learning goals
- How would you change the field station outreach goals that you wrote earlier?

Reflecting & Wrapping Up



- Name one thing that you didn't know before you started this workshop.
- What was useful about today's session?
- What stands out for you about today's session?
- What have you learned today that you will take back to implement at your field station?