B-WET BAY WATERSHED EDUCATION & TRAINING PROGRAM

Lessons Learned from the NOAA B-WET National Evaluation System

Bronwen Rice Jaime Frungillo National Oceanic and Atmospheric Administration (NOAA)

> Michaela Zint Jennifer Carman University of Michigan

> > NAAEE National Conference October 2017



< B-WET Gulf of Mexico

Outline

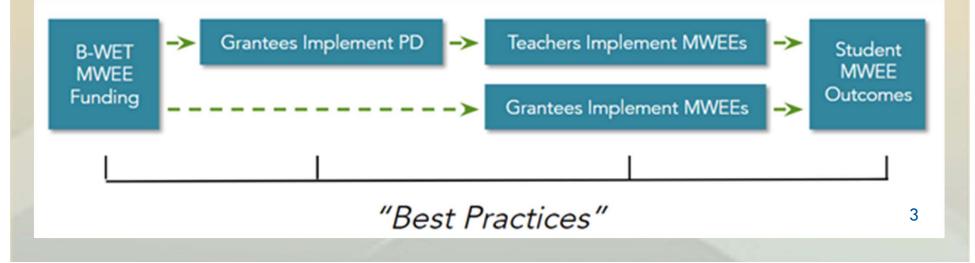


Background: B-WET &
Evaluation
Overview of select
results
Small group discussion
Resources available

The B-WET National Evaluation System

Designed to evaluate "meaningful watershed educational experiences" or MWEEs

MWEEs are multi-stage activities that include learning both outdoors and in the classroom and aim to increase understanding and stewardship of watersheds and related ecosystems.



Data Collection

Grantee Survey: end of the grant period (annually) **Teacher Surveys:** 1) after professional development ("PD Survey"), and 2) at the end of the following school year ("MWEE Survey")

< B-WET Pacific Northwest

What do we do with the data?



- Ensure anonymity intention is to evaluate MWEEs, not individual grantee or teacher
- Review aggregated data at national and regional levels to inform program decisions
- Grantees can view teachers responses through password protected private reports
- Aggregated data set will be available to researchers, to inform field

< B-WET Great Lakes

Activity: Discuss Select Results (April 2014-June 2016)

We'll review report findings and data related to two topics:
1. Stewardship Actions
2. Teacher Professional Development Practices

Stewardship Actions: Key Findings

- 72% of teachers participated in at least one stewardship behavior during their professional development (PD), primarily in watershed restoration/protection (35%).
- 82% of teachers engaged their students in stewardship behaviors as part of their MWEEs, primarily in everyday choices (57%).
- Few teachers experienced civic actions during their PD (3%), engaged their students in these actions during MWEEs (11%), and expected students to engage in civic actions as a result of MWEEs.

Teacher Professional Development Practices: Key Findings

MWEE PD increases teachers' confidence and intention to implement MWEEs and their watershed literacy. There are some specific PD practices that predict teacher confidence and teacher perceptions of student outcomes.

75% of teachers implemented MWEEs with their students within 12 months of their PD. Teachers who were more confident in their abilities to implement MWEEs were more likely to do so within 12 months of their PD.

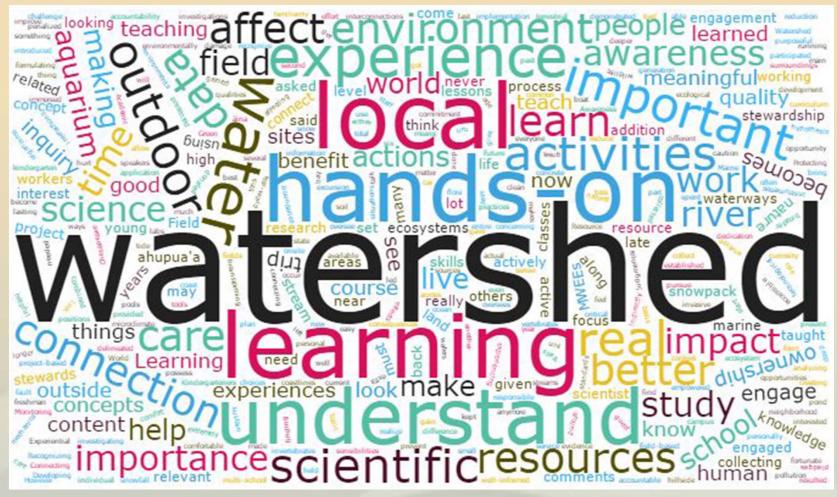
Preliminary evidence suggests that teachers who implemented MWEEs had spent more time outdoors during their PD.

Activity:

Divide into 2 breakout groups (1 per topic). In each group: (20 mins)
Review and discuss the evaluation report data handout

- Wrap-up discussion (10min)
 - Q&A from activity
 - **Evaluation system resources**

What is the most important benefit of MWEEs for your students?



Evaluation Resources

Resources for Evaluation System Participants

As part of this evaluation system, recipients of B-WET grants and teacherparticipants in grantees' professional development programs are asked to voluntarily complete online questionnaires to provide evaluation data. One individual from each grantee organization will be asked to complete a questionnaire once per year of the award. For projects that work with teachers, the teacher-participants will be asked (using email addresses provided by the grantee organization) to complete one questionnaire at the close of their professional development and one after implementing Meaningful Watershed Educational Experiences with their students (at the end of the following school year). Grantees should be able to complete their questionnaire within 30-60 minutes (depending on the nature of their program) and teachers, within 30 minutes. B-WET grantees and teachers who respond to the questionnaires will remain anonymous.

Grantee Instructions (PDF)

ž

퀭

औ

RS

哭

 \square

51.2

ġ

X

Start here to learn about the mechanics of the evaluations system and how you can participate.

Frequently asked questions

Comprehensive list of common questions from grantees. Please check here to see if your question is answered before contacting your program manager.

Evaluation overview webinar presentation slides (PDF)

Annual overview webinar providing grantees with details about how to participate.

- Survey
 instruments
- Grantee instructions
- Overview presentation
- Student item bank and guidance

11

http://www.noaa.gov/office-education/bwet/granteeresources/national-evaluation

B-WET BAY WATERSHED EDUCATION & TRAINING PROGRAM

FOR MORE INFORMATION ON B-WET EVALUATION:

Bronwen Rice B-WET National Coordinator <u>Bronwen.Rice@noaa.gov</u> 202-482-6797

http://www.noaa.gov/office-education/bwet

<u>http://www.noaa.gov/office-</u> education/bwet/grantee-resources/nationalevaluation

http://www.facebook.com/noaabwet



12