



Water Outreach Education

Facilitating Access to Resources and Best Education Practices

Assessing Our Skills and Confidence in Changing Public Behavior

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USDA CSREES 2009 National Water Conference

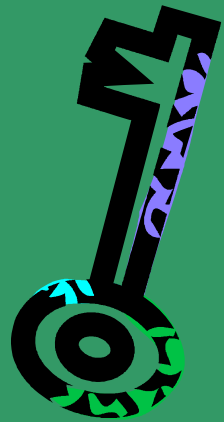


Changing Public Behavior

Increase Citizen Involvement Using Target Audience Information





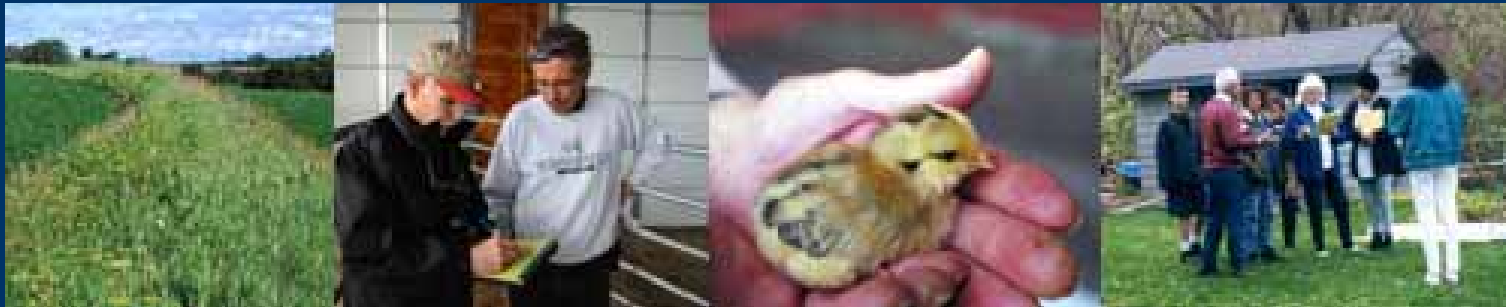
Key components of a successful water management plan



- ❖ Community involvement
- ❖ Focus on target audiences
- ❖ Quality outreach initiatives

Focus on behavior change

❖ How do you get from 
the *need* you have identified 
to the *outcomes* you hope for?





National Facilitation Projects

Project resources help educators to:

- Connect the situation with the people
- Choose achievable goals
- Select relevant outreach techniques
- Get measurable results

<http://wateroutreach.uwex.edu>

National Extension Water Outreach Education

Facilitating Access to Resources and Best Education Practices

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WATER EDUCATION TOPICS

Best Education Practices, BEPs

- >> [What are BEPs?](#)
- >> [Essential BEPs](#)
- >> [FAQs about BEPs](#)
- >> [BEP Research](#)

Use BEPs

- >> [Accomplish What?](#)
- >> [Plan](#)
- >> [Choose BEPs](#)
- >> [Learn from Others](#)
- >> [Assess a Program](#)

Educational Resources

- >> [Tools for Teaching](#)
- >> [Researcher's Guide](#)
- >> [Search Resources](#)
- >> [Submit Resources](#)
- >> [e-Networking](#)

Professional Development

- >> [BEP Short Course](#)
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Welcome

Whether planning a new outreach effort or revitalizing an existing one, incorporating best education practices (BEPs) into your water management strategies is critical for achieving success.

Web site resources help educators to:

- Connect the situation with the people
- Choose achievable goals
- Select relevant outreach techniques
- Get measurable results

Use the navigation buttons found in the tool bars to the left of this window to plan your initiative. Use [Changing Public Behavior resources](#) to tailor your initiative to a particular audience and specific goals. Or try a more structured route by choosing one of the following options:

[How do I set up or improve my water education or outreach program?](#)

- How do I get started?
- How do I improve my program?
- How does my work measure up to BEPs?

[What web site resources will help me reach my water management goals?](#)

- Use good educational practices.
- Use educational resources.
- Use professional development resources.
- Use water management and issues resources

FEATURED RESOURCES

[CHANGING PUBLIC BEHAVIOR](#)
[USDA/CSREES National](#)
[Facilitation Project](#)

[2004 BEP Symposium Report](#)
[and Proceedings](#)

[Target Audience Research](#)

[BEP Decision Tree](#)

[Defining Successful Water](#)
[Programs](#)

[Submit a Resource](#)



National
Facilitation
Project

<http://wateroutreach.uwex.edu>

❖ The Changing Public Behavior Project

- Created workshop activities and an online Self-Study Module

▶ **GOAL:** Extension natural resource professionals and educators increase their skills in collecting and using audience information for designing an outreach strategy



❖ Challenges of focusing on **a target audience** as part of a water management strategy ??

- Applying social marketing techniques?
- Applying social assessment tools?

➔ What are we learning from natural resource professionals and educators?



- ❖ Changing Public Behavior workshops
 - 5 pilot workshops in 2008
 - Tested which techniques and resources:
 - ▶ Are most satisfying to participants
 - ▶ Are most likely to increase participant self-confidence in applying social science techniques to promote pro-environmental behaviors

❖ Workshop participants

- Completed pre- and post- workshop questionnaires assessing
 - ▶ Participant skills and confidence in using education techniques and social assessment tools when designing outreach efforts.
- Evaluated workshop presentations and resources.
 - ▶ Evaluation data has been used to fine-tune workshop materials and activities, as well as the online Self-Study Module.

❖ In this session we will:

- Identify the skill needs
 - ▶ Of educators interested in applying social marketing or other social assessment tools in their outreach work
 - ▶ Reported by participants in pre-workshop questionnaires
- Provide a brief summary of post-workshop evaluation findings

Training features:

Develop and use audience information

❖ Workshop and Web-based Self-Study Module helps educators learn:

- What questions to ask
- What tools to use to gather social science information
- How to use the tools and how to analyze results
- How to use results to select outreach techniques that satisfy audience needs



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WATER EDUCATION TOPICS

- + Best Education Practices, BEPs
- + Use BEPs
- + Educational Resources
- + Professional Development
- + Other Resources

WATER MANAGEMENT TOPICS & ISSUES

- Animal Waste Management
- Drinking Water and Human Health
- Environmental Restoration
- Nutrient and Pesticide Management
- Pollution Assessment and Prevention
- Water Conservation and Agricultural Water Management
- Water Policy and

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Changing Public Behavior



Applying education tools and techniques help natural resource professionals and agencies realize their water management goals. The Changing Public Behavior National Facilitation Project focuses attention on the application of social science tools to enhance the education process.

Scientists, natural resource professionals, or educators can develop and use audience information to improve citizen involvement in community decision-making for water resources.

Choose topics from the right to learn:

- What questions to ask
- What tools to use to gather social science information
- How to use the tools and how to analyze results
- How to use results to select outreach techniques that satisfy audience needs



CHOOSE SOCIAL ASSESSMENT TOOLS



[Searchable Target Audience Database](#)

[How to Use Audience Information: Educator Self-Study Module](#)

Background Information:

[What type of action can citizens take?](#)

[Types of behavior that can make a difference](#)

About social assessment tools: Purpose, use, selection, application
([Self-Study Module: Step #4](#))

[Sample tools](#)

Criteria for adoption

Sample intervention goals

<http://wateroutreach.uwex.edu/CPBhomepage1.cfm>

Connecting social assessment skills with educator skills



Educator Skills



Social Assessment Skills

The CPB training module describes a 7-step process for incorporating audience information into a water outreach initiative.

Training features: Behavior Change Planning Tool



EDUCATING ABOUT BEHAVIOR AND THE ENVIRONMENT

Use this worksheet to: a) Set measurable and achievable goals; b) Identify the audience and develop audience information; c) Identify outreach techniques unique to the problem and each target audience. While it's important to complete each step, results of any one step often take you back to a previous step to provide more detail or clarity.

STEP 1 – Assess and describe the problem or opportunity in cooperation with stakeholders, key informants, and experts:

STEPS 2 & 4 – Audience

- Identify and engage in a preliminary dialogue with the primary audience(s) and secondary audience(s) in cooperation with stakeholders, key informants, and experts.
- Collect and analyze information about each audience relative to the target behaviors. Consider current behavior, perceived consequences, barriers, social norms, knowledge, skills.

STEP 3 & 5 – Behavior change analysis

- Describe the preferred environmental practice that could have an impact on the environmental problem. Integrate advice from experts, stakeholders, and key informants.
- Outline single behaviors required to implement the environmental practice. An *ideal* behavior is a single, observable action that experts consider people need to perform in order to reduce or help resolve a specific environmental problem.
- Assess potential for adoption of single behaviors and potential for adoption of the environmental practice.

STEPS 6 & 7 – Identify relevant behaviors and outreach techniques

- Compare audience information with single behaviors to identify relevant behaviors for adoption.
- Use audience information to craft one or more audience-specific outreach techniques to address selected behaviors.
- Monitor and evaluate.

2. Primary audience: _____ Secondary audience: _____		5. Rate potential for behavior change Is it likely that the user will adopt the behavior? [yes, maybe, don't know, no]				6. Select recommended behavior(s)	7. Describe outreach or education strategy. Use audience information.				
3a. Environmental Practice Describe the practice that a specific audience can implement to address the environmental problem.	3b. Single Behaviors Outline steps to accomplish the environmental practice. What does the audience need to be able to do?	4. Audience Information Identify and understand "segments" of the relevant population. What does the audience already do relative to the preferred behavior? Are there barriers? What are audience skills/ interests/ interests?		Does it meet an audience need or address an interest?	Does it have an impact on the problem?	Does it provide users with an observable consequence?	Is it similar to what the user does already?	Is it low cost in \$, time and energy for the user?	Is it low cost in \$, time and energy for the user?	Select behaviors that have potential for adoption. Revise problems statement and target audience selection, if necessary.	<ul style="list-style-type: none"> Ask for a commitment? Provide a specific prompt, near behavior? Communicate the norm? Remove barriers? Provide information? Increase skills? Engage in a problem-solving activity?

Decide what you need to know about your audience and the best way to gather the information.

Analyze audience information. Will the audience adopt the desired behavior?

Training features: Background information

Resources help educators to **choose** and **use assessment tools** to learn about the audience

❖ THEORY & RESEARCH



❖ APPLICATION

- Previous research
- Census data
- Delphi method
- Focus groups
- Informal interviews
- Observations
- Participatory action research
- Public participation
- Rapid appraisal
- Surveys

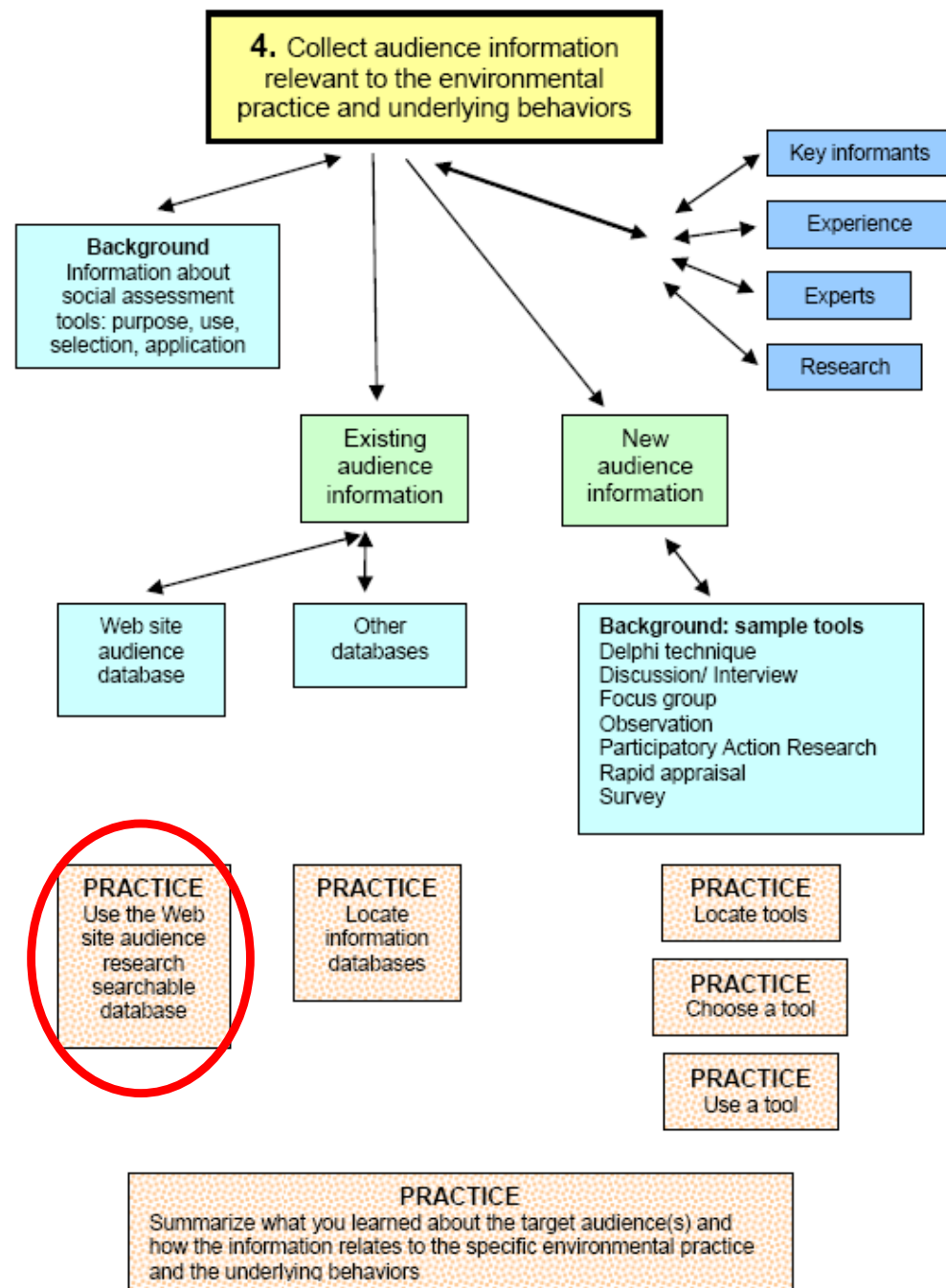
Training features: Step by step instructions

Assignment

Background resources online

Participant options

Practice activities



Other suggested sources of information

Background resources online

Practice activities

Training features: Practice activities

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Audience | Study Themes | [Best Education Practices](#)

Changing Public Behavior > Audience > [Loggers](#) > Outreach strategy/Design

1 Total Findings

Provide training with a clear goal, geared toward the needs of a target audience. Require locally extensive training. In a study with a small sample group, this requirement was shown to increase peer group awareness and implementation of skills.

> Loggers
> Outreach Strategy/Design

“Provide training with a clear goal, geared toward the needs of a target audience. Require locally extensive training. In a study with a small sample group, this requirement was shown to increase peer group awareness and implementation of skills.”

WATER EDUCATION TOPICS

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- Use BEPs
- Educational Resources
- Professional Development
- Other Resources

WATER MANAGEMENT TOPICS & ISSUES

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- Environmental Restoration
- Nutrient and Pesticide Management
- Pollution Assessment and Prevention
- Water Conservation and Agricultural Water Management
- Water Policy and

❖ 5 pilot workshops in 2008


■ Participants

- ▶ Natural resources educators
- ▶ Natural resources managers
- ▶ Administrators from Extension programs, public agencies, and non-government organizations

■ Audience groupings

- ▶ Primarily Extension professionals
- ▶ Mixed Extension and other natural resources and administrative professionals

Pre-workshop needs assessment

- ❖ Pre-workshop survey questions  participants select one or more answers from a list
 - Who is your target audience(s)?
 - What educator skills or experiences do you need? (N = 139)
 - What social assessment skills do you need? (N = 126)

Training Goal: Educator Skills

- ✓ Describe an environmental problem or opportunity
- ✓ Work in collaboration with a target audience
- ✓ Define single **behaviors** that lead to an environmental **practice**
- ✓ Gather information about the target audience

Training Goal: Educator Skills

- ✓ Match audience information with required behaviors
- ✓ Determine which behaviors will become the focus for the outreach initiative
- ✓ Implement an outreach initiative
- ✓ Monitor and Evaluate

Training Goal: Social Assessment Skills

- ✓ Collect audience information
 - ✓ Apply an ethical approach when gathering information from individuals
 - ✓ Select and apply a data gathering procedure appropriate to the situation
 - ✓ Use audience information

Top educator skill needs

What educator skills or experiences do you need? (N = 139)	% of educators identifying skill as needed ~ across both groups
E. Initiating a dialogue with target audiences and stakeholders	57%
I. Using target audience information to assess the potential for behavior change	64%
K. Developing and implementing outreach activities that influence selected behaviors	80%
L. Monitoring results	58%
M. Evaluating results	63%

Significant differences between groups

What educator skills or experiences do you need? (N = 139)	Extension Professionals Only	General NR Professionals Only
E. Initiating a dialogue with target audiences and stakeholders	39%	70%
F. Describing an environmental practice that affects the environmental concern	21%	35%
H. Identifying target audience interests and skills	32%	50%
I. Using target audience information to assess the potential for behavior change	53%	72%
K. Developing and implementing outreach activities that influence selected behaviors	70%	87%
L. Monitoring results	47%	66%
M. Evaluating results	56%	68%

Significant differences between groups

Educator Skills

- ❖ **NEITHER AUDIENCE** (40% or fewer selected these options/or the difference was not significant)
 - B. Identifying an environmental management opportunity or concern
 - C. Assessing and describing an environmental management opportunity or concern
 - F. Describing an environmental practice that affects the environmental concern

Significant differences between groups

Educator Skills

- ❖ **NEITHER AUDIENCE** (40% or fewer selected these options/or the difference was not significant)
 - G. Analyzing the environmental practice to identify single behaviors that make up the practice
 - J. Prioritizing and agreeing on behaviors
 - N. Modifying description of the environmental concern or opportunity based on information about the target audience

Significant differences between groups

Educator Skills

- ❖ BOTH AUDIENCES (40% or more selected these options/or the difference was not significant)
 - A. Clarifying personal motives and interests related to an environmental concern, audiences, and stakeholders
 - D. Identifying target audiences and stakeholders*
 - I. Using target audience information to assess the potential for behavior change
- * (marginal need – just under 40% on average and no significant difference)

Significant differences between groups

Educator Skills

- ❖ BOTH AUDIENCES (40% or more selected these options/or the difference was not significant)
 - K. Developing and implementing outreach activities that influence selected behaviors
 - L. Monitoring results
 - M. Evaluating results

Significant differences between groups

Educator Skills

- ❖ ADDITIONAL NEEDS, for the mixed audience
 - E. Initiating a dialogue with target audiences and stakeholders
 - H. Identifying target audience interests and skills

Top social assessment skill needs

What social assessment skills do you need? (N = 139)	% of educators identifying skill as needed ~ across both groups
B. Work in collaboration with the audience	53%
C. Selecting a data gathering or social assessment procedure, such as audience segmentation, background research, Delphi method, focus groups, informal interviews, observations, participatory action research, public meeting facilitation, rapid appraisal or surveys.	71%
D. Apply a data gathering procedure	60%
F. Analyze and summarize results	58%
G. Apply results	54%

Significant differences between groups

What social assessment skills do you need? (N = 139)	Extension Professionals Only	General NR Professionals Only
B. Work in collaboration with the audience	40%	62%
D. Apply a data gathering procedure	53%	65%
H. Sharing results with stakeholders, funders, and target audience	30%	62%

Significant differences between groups

Social Assessment Skills

- ❖ **NEITHER AUDIENCE** (40% or fewer selected these options/or the difference was not significant)
 - A. Employing ethics in audience assessment processes

Significant differences between groups

Social Assessment Skills

❖ **BOTH AUDIENCES** (40% or more selected these options/or the difference was not significant)

- B. Working in collaboration with the audience
- C. Selecting a data gathering or social assessment procedure.
- D. Applying a data gathering procedure
- F. Analyzing and summarizing results
- G. Applying results

Significant differences between groups

Social Assessment Skills

- ❖ ADDITIONAL NEEDS, for the mixed audience
 - E. Recording oral and visual data
 - H. Sharing results with stakeholders, funders, and target audience

Educator Needs: Conclusions

- ❖ For CPB training to be effective
 - Assess participant needs
 - ▶ Maximize training activities, for topics where at least 40% of the participants indicates a need

Educator Needs: Conclusions

- ❖ For CPB training to be effective
 - A mixed group of natural resource professionals may need additional support, as compared to training for a group of experienced Extension professionals, especially related to:
 - ▶ Working with the target audience, stakeholders, and funders
 - ▶ Developing and implementing a relevant outreach initiative
 - ▶ Monitoring and evaluating results

Educator Needs: Conclusions

- ❖ In 2 CPB all-day trainings, post-event evaluations indicated:
 - 78 & 84% increased their **confidence in using** the CPB planning steps “moderately” to “a lot”.
 - 84 & 85% increased their **ability to use** the CPB planning steps “moderately” to “a lot”.

Educator Needs: Conclusions

- ❖ In 2 CPB all-day trainings, post-event evaluations indicated:
 - 84 & 81% indicated increased **confidence in applying educator skills** ("slightly" to "moderately").
 - ▶ 88 & 80% felt that the workshop increased their awareness of **sources of information** about educator skills "moderately" to "a lot".
 - 84 & 77% indicated increased **confidence in applying social assessment skills** ("slightly" to "moderately").
 - ▶ 91 & 74% felt that the workshop increased their awareness of **sources of information** about social assessment skills "moderately" to "a lot".

Educator Needs: Conclusions

- ❖ Key educator needs for CPB training
 - Using target audience information to assess the potential for behavior change
 - ▶ Working in collaboration with the audience
 - ▶ Selecting a data gathering or social assessment procedure
 - ▶ Applying a data gathering procedure
 - ▶ Analyzing and summarizing results

Educator Needs: Conclusions

- ❖ Key educator needs for CPB training
 - Developing and implementing outreach activities that influence selected behaviors
 - ▶ Applying results
 - ▶ Monitoring results
 - ▶ Evaluating results



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