



Designing and Evaluating Educational Projects, Programs, and Materials

Flaxen Conway channeling Shawn Rowe

First ever nation-wide SG Fisheries Extension Meeting

October 17, 2006, Jacksonville Beach, FL

Shawn.Rowe@oregonstate.edu

Flaxen.Conway@oregonstat.edu



Free-Choice Learning



We remember

10% of what we read,

20% of what we hear,

30% of what we see,

50% of what we hear and see,

70% of what we say,

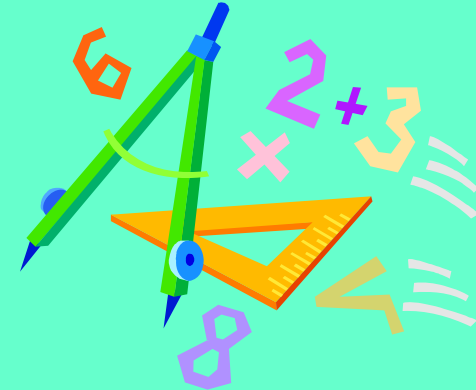
and 90% of what we both say and do.

B. A. Todd, "Cooperative Learning in a Distance Learning Environment," 1997 ASEE
Southeastern Section Meeting, Marietta, GA, 1997.

Design

The design must be based on:

- Need, validity, and feasibility
- Alternatives (considered)
- Needs of stakeholders
- Contextual factors



*Measure twice, cut once,
as you continue to build
each part of your project!*

Evaluation

NSF says evaluation can...

- help increase knowledge
- provide evidence for accountability
- improve projects
- support the value and feasibility of projects and activities.

Evaluation

- Will/does our work make a difference? If so, how or how much? If not, why not?
- Can we know this instead of just having gut feelings?
- Can evaluation help us document mistakes and learning?
- Do we understand our audience(s) and their needs?
- Does our work bring about change(s) in our audiences? Are they changing what they do? Are they solving problems?

Evaluation's Function

Who we are doing the evaluation for...

Ourselves? Our bosses? The community? The government? Our clientele? Our funders?

What is its purpose...

Reflection? Funding? Promotion? Advocacy?

Dual Motivations for Evaluation?

- We face **External pressure to document successes** or at least demonstrate measurable impact
- We have **Internal motivation to improve and learn** how to better do what we want to do and believe in

Can evaluation do both?

YES!

BUT.....

And besides...

You are already experts!

To do an evaluation plan...

1. Begin by **NOT** knowing what to do.
2. Begin with **what is happening.**
Your personal knowledge matters.
3. Work **from the general to the specific.**

4. Let the analytic and integrative modes of thinking **interact.**
5. **Formulate general questions** to guide the evaluation.
6. Use evaluation methods **flexibly.**
7. **Monitor --> Recycle --> Rethink.**

Assume your plan is going to change.

More Definitions

- ✓ Purposes of Evaluation
- Timing
- Types of data
- Tools to get it

Timing / types of evaluation

Front-end evaluation / needs assessment

- Occurs in the beginning stages
- Can help you learn about you're audience
- May help to establish goals and objectives

Formative evaluation

- Occurs throughout the project
- Helps keep you on track and respond to what you are learning about your audience
- Iterative

Summative evaluation

- Is what most people think of
- Occurs near the end of the project or after
- Helps you learn about longer-term effectiveness

Always gather and report your findings somewhere!

Types of Data

Quantitative

- Classifies diverse things into established categories
- Looks for numerical patterns in data
- Is concerned with a limited set of variables
- Uses statistical tests to make comparisons
- Are generally easily generalizable.

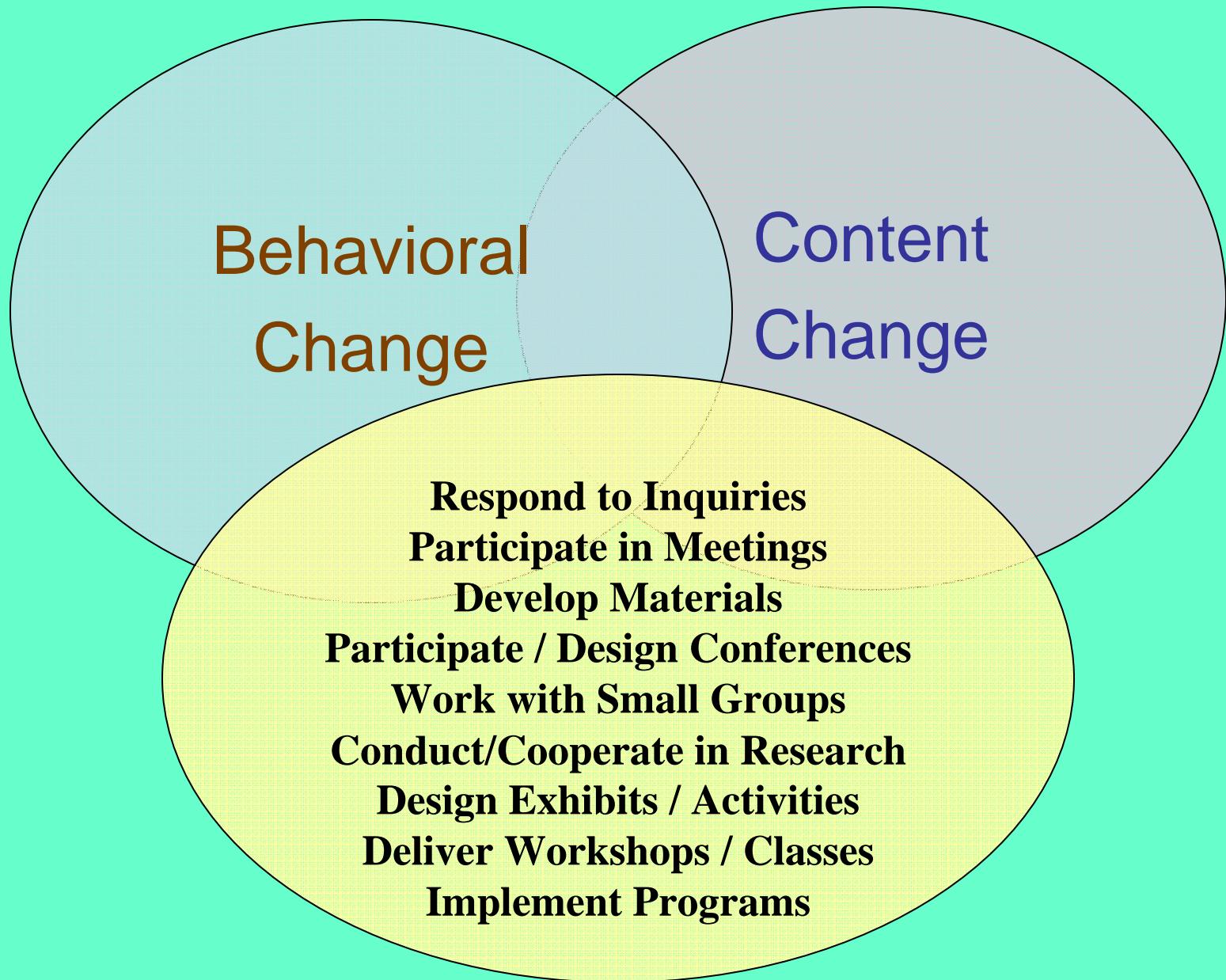
Qualitative

- Emphasizes depth over generalizability
- Pays close attention to individual cases or events
- Seeks exceptions as well as overall trends
- Seeks complex descriptions of situations with many variables.

Some Basic Tools

- Surveys
- Questionnaires
- Interviews and focus groups
- Observation
- Counting (e.g. web “hits”; #’s reached)
- Documents (including participant generated documents of all kinds)
- Photographs/Video

Be opportunistic! Think about what you already have / what’s already in the environment (security camera studies).



Evaluation Starts with Articulating What is Going to Count as Impacts and Outcomes

- What is the objective of the evaluation?
- What will be evaluated?
- What are the goals of the project?
- What are the measurable sub-goals /objectives related to each of those goals?
- How will the evaluation be done?
- Who is conducting the evaluation?
- What are the strengths and weaknesses of particular tools?
- Who are the stakeholders and how will they be involved?
- When will reports be made, to whom and for what?

In small groups

- 1. Identify a change** (a broad scale goal) that you would like to see.
- 2. Outline what you believe are the steps** (objectives) it would take a person, program, group, etc., to get to that broad goal.
- 3. Identify how you would measure progress** toward or through each one of these steps/sub-goals (**outcomes → impacts**).

Resources

Designing and Evaluating Educational Projects,
Programs, and Materials



Judy Diamond, *Practical Evaluation Guide: Tools for Museums and Other Informal Educational Settings*. Altamira Press

E. Jane Davidson, *Evaluation Methodology Basics: The Nuts and Bolts of Sound Evaluation*. SAGE

Michael Quinn Patton, *Qualitative Research and Evaluation Methods*. SAGE

The Evaluation Center at Western Michigan University
(directory of evaluators) ec.wmich.edu/evaldir/index.html

Audience Dialogue: Evaluating Communications and Media
(Dennis List, et.al) www.audiencedialogue.org/