Overview

1) Introduction & Goals
2) Why Evaluate?
3) How to Evaluate
   ✓ Key Concepts
   ✓ A General Model
   ✓ Closer look at Phases
4) Final thoughts
5) Questions & Discussion
Introduction and Goals

- Thanks
- Goals
  1. Overview of considerations in program evaluation
  2. Encouragement
Why Evaluate?

- Same reason we keep score, give grades, keep a checkbook, etc.
  - Curiosity
  - Accountability
  - Optimism
  - And other good reasons...
Key Concepts

- Program Evaluation and Evaluation Research
- Formative and Summative Evaluation
- Evidence and Evidence-based
Evaluation and Evaluation Research

**Definition of Evaluation**

*Evaluation is the systematic acquisition and assessment of information to provide useful feedback about some object*

(Trochim & Donnelly, 2007, p. 352)

**What makes it evaluation research?**

- You know, the stuff Dr. Espelage was talking about...
- To meet federal definition of research, a study must be attempting to add to generalizable knowledge
- So if you plan to use your study for internal program evaluation, it is evaluation but not research.
Formative & Summative Evaluation

- **Formative evaluation**
  - Strengthen or improve the program being evaluated
    - Examine quality of implementation, organizational context, personnel, procedures, inputs, and so on.

- **Summative evaluation**
  - Summarize the effects or outcomes of a program
    - Assess whether the program can be said to have caused the outcome
    - Determine the overall impact
    - Estimate the relative costs associated with the program
Formative & Summative Evaluation Cont.

- Don’t think of them as entirely separate or independent processes.
- A relatively recent review of effectiveness of bullying programs concluded that:
  - “On the whole, programs in which implementation was systematically monitored tended to be more effective”
  - (Smith & Anadiou, 2004, p. 547)
Evidence-based Practice

- The use of the best available programs or treatments based on careful evaluation using critically reviewed research
  - (Sackett et al., 2000)
A very Brief History of Evaluation

- Remember the ‘60’s?
- A time of social and personal experimentation
  - Mostly uncontrolled
  - An exception:
    - Donald T. Campbell & the Experimenting Society

- Fun facts
  - Contributed to psychology, sociology, anthropology, biology & philosophy
  - Most cited psychologist in history of psychology
  - Inspired Campbell Collaboration
  - Optimistic but wise, as in “Campbell’s Law”
Campbell’s Law: “The Corrupting Effect of Quantitative Indicators”

The more any quantitative social indicator is used for social decision-making, the more subject it will be to corruption pressures and the more apt it will be to distort and corrupt the social processes it is intended to monitor. (1976, p. 50)
Brief History Continued

- Where are we now?
  - From the Experimenting Society to the
  - Global Interconnected Multicultural Money-driven Evidence-based World
    - The GIMME World
- But let’s be positive...
- The Campbell Collaboration
  - Evolutionary Epistemology
More Recent History

- Campbell’s student William Trochim calls for:
  - Systems Thinking in an Evaluation Culture
    - Evaluation can be a threatening activity
    - So make it an everyday part of life
    - Build an organizational culture that values information and learning
    - Keep it simple (whenever possible)
The Planning-Evaluation Cycle

William Trochim, Ph.D.
PLANNING PHASE

Formulation of problem, issue or concern

Conceptualization of possible alternatives, actions, strategies

Detailing of possible alternatives and their implications

Evaluation of alternatives and selection of best

Implementation of selected alternatives

Formulation of evaluation questions & hypotheses

Conceptualization of how to measure program, outcomes, and target population

Design of how to coordinate components of evaluation

Analysis of evaluation data

Utilization of results in management of decision making

EVALUATION PHASE
A Closer Look at Some Key Phases in the Evaluation Cycle

1) Formulation of the Question/Hypothesis
2) Conceptualization of Measures/Outcomes
3) Design of Evaluation Procedures
4) Analysis
5) Utilization
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- Formulation of evaluation questions & hypotheses
- Utilization of results in management of decision making
Formulation of Questions/Hypotheses

Do you want to ask a question or state a hypothesis?

1) Example of a Question:
   - Did something change?

2) Example of a Hypothesis:
   - There will be a change in something associated with Program X that is not attributable to other things including chance variation
Examples of Formative Evaluation Questions

• What’s the question?
• Where is the problem and how big or serious is it?
• How should the program be delivered to address the problem?
• How well is the program delivered?
Examples of Summative Evaluation Questions

- What was the effectiveness of the program?
- What is the net impact of the program?
- How much did it cost?
- Were there any unexpected results (good or bad)?
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Formulation of evaluation questions & hypotheses
Conceptualization of Measures/Outcomes

- What should your program affect?
  - Consider a program theory or logic model to make your expectations explicit
  - Example Logic Model from Olweus Grant Writer’s Toolkit on next slide

(800-328-9000 hazelden.org/olweus)
<table>
<thead>
<tr>
<th>RESOURCES</th>
<th>ACTIVITIES</th>
<th>OUTPUTS</th>
<th>SHORT- &amp; LONG-TERM OUTCOMES</th>
<th>IMPACT</th>
<th>EVALUATION METHODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endorsement from school administrators at Appleton and Franklin Middle Schools</td>
<td>12 members from each coordinating committee will participate in a 2-day training the first year, a 1-day training the second year, and govern the program throughout the project.</td>
<td>Teachers of grades 6, 7, and 8 will conduct 20-40-minute classroom meetings with over 900 students.</td>
<td>The number of students who report being bullied will be reduced.</td>
<td>The number of incidents regarding bullying and other violent behavior will be reduced in and out of school.</td>
<td>School staff members will be given pre-program and post-program questionnaires to determine changes in knowledge, attitudes, and behaviors related to bullying prevention and response.</td>
</tr>
<tr>
<td>Identification and involvement of a Bullying Prevention Coordinating Committee at each school</td>
<td>132 staff members will be trained in the Olweus program and will be given materials to support their efforts.</td>
<td>Other school staff will appropriately respond to incidents regarding bullying and will promote anti-bullying behavior.</td>
<td>The number of students who bully will be reduced.</td>
<td>Young people will report feeling safe coming to school.</td>
<td>The anonymous student survey (Olweus Bullying Questionnaire) will be administered in early fall of 2006 and at the close of the next school year, spring 2007.</td>
</tr>
<tr>
<td>Training and technical assistance from Olweus-Certified Trainers (Clemson University)</td>
<td>The Olweus Bullying Questionnaire will be distributed to over 900 students.</td>
<td>Teachers will provide information to at least 500 parents about bullying during parent meetings.</td>
<td>Reports of general antisocial behavior (e.g., vandalism, fighting, theft, and truancy) among students will be reduced.</td>
<td>School performance will increase as a result of students feeling safe in their schools.</td>
<td>Data from the Regional Youth Risk Behavior Survey—administered in 2005 and again in 2007—will be analyzed to determine trends in perception of school safety and number of bullying incidents.</td>
</tr>
<tr>
<td>Materials and data collection tools from Professional and Educational Services at the Hazelden Foundation</td>
<td>Rules and policies will be gathered and reviewed.</td>
<td>Staff members will hold individual meetings with children who bully with children who are targets of bullying, and with parents.</td>
<td>Youth attitudes toward schoolwork and school will improve.</td>
<td>Other elementary and middle schools in the Brighton Public Schools and in Founders Park will adopt the Olweus program as a result of the successful outcomes of this program at Appleton and Franklin Middle Schools.</td>
<td></td>
</tr>
<tr>
<td>Funding from the Best Foundation</td>
<td>Over 1,000 parents will be given information about bullying prevention.</td>
<td>Schoolwide rules against bullying will be adopted and</td>
<td>Peer relations at school will improve.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment from school staff members</td>
<td></td>
<td></td>
<td>The number of students who report being comfortable talking to a teacher and/or a parent about bullying will increase.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the Olweus Grant Writer’s Toolkit
800-328-9000
hazelden.org/olweus

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Measures/Outcomes Continued

- Advantages of well developed measures
  - More credible evidence
  - More comparable evidence
- Multidimensional problem needs multidimensional measurement
- Some possible objects of measurement:
  - School climate
  - Teacher, Student, Parent perceptions
  - Costs
  - Counts of naturally occurring events
    - (e.g., suspensions---could be good or bad)
EVALUATION PHASE

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The evaluation design should match the evaluation question.

Which designs produce credible evidence?

Consider Schwandt’s theory of credible evidence

(adapted from Upshur, VanDenKerkhog & Goel, 2001)
Conceptual Taxonomy of Evidence (Schwandt, 2009)

Meaning (Qualitative)

Subjective, Personal & Narrative

Social & Historical

Particular

Mathematical & Personal

General

Mathematical & Common

Measurement (Quantitative)

Methods

Context
Implications

1) Useful evaluation knowledge might be numerical but it might not

2) Usefulness of evidence is not determinded by a hierarchy, but by “a mediation of the context of its use and method of its production”
(Schwandt, 2009, p. 207)
Four Major Kinds of Evaluation Designs

1) Scientific/Experimental Models
2) Management Oriented Evaluation Models
3) Qualitative & Anthropological Models
4) Participant-oriented Models
Scientific/Experimental Models

- Well known methods aimed at:
  - testing hypotheses
  - identifying threats to valid inference
  - utilizing objective measures
  - statistical analysis
Scientific/Experimental Models

- Common/simple quantitative designs:
  - Post-test only
  - Pre-post
  - Pre-post with comparison group

- Uncommon/more complex quantitative designs:
  - Randomized experiment
  - Regression-discontinuity
  - Interrupted time series
Management-oriented Systems Models

- PERT, the Program Evaluation and Review Technique
- CPM, the Critical Path Method.
- Both have been widely used in business and government in this country.
- These management-oriented systems models emphasize comprehensiveness in evaluation, placing evaluation within a larger framework of organizational activities.
Qualitative & Anthropological Models

- Emphasize importance of
  - observation
  - need to retain the phenomenological quality of the evaluation context
  - value of subjective human interpretation in the evaluation process.
Design Continued

- Some relatively simple qualitative designs
  - Case study
  - Open-ended survey
  - Focus group
- Some more complex qualitative designs
  - Multiple case study
  - Grounded theory
  - Causal networks cross-site design
Participant-oriented Models

- Emphasize the central importance of the evaluation participants, especially clients and users of the program
- Client-centered and stakeholder approaches are examples of participant observer models, as are consumer-oriented evaluation systems
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CONCEPTUALIZATION OF POSSIBLE ALTERNATIVES, ACTIONS, STRATEGIES

DETAILING OF POSSIBLE ALTERNATIVES AND THEIR IMPLICATIONS

EVALUATION OF ALTERNATIVES AND SELECTION OF BEST

IMPLEMENTATION OF SELECTED ALTERNATIVES

ANALYSIS OF EVALUATION DATA

DESIGN OF HOW TO COORDINATE COMPONENTS OF EVALUATION

CONCEPTUALIZATION OF HOW TO MEASURE PROGRAM, OUTCOMES, AND TARGET POPULATION

FORMULATION OF EVALUATION QUESTIONS & HYPOTHESES

UTILIZATION OF RESULTS IN MANAGEMENT OF DECISION MAKING
Analysis

- Analysis should fit the question, measures & design
- Keep it simple/Answer the question
- Think about what a meaningful change would look like
  - A “clinically significant difference”
  - Important in both planning and evaluation
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- **Formulation** of evaluation questions & hypotheses
Utilization

- How will the results be used?
- How will you report to stakeholders & maintain engagement?
- What changes in programs and policies should be considered?
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Semi-Final Thoughts

- Remember the concept of an evaluation culture
  - If we all participate, we may all benefit
- Don’t reinvent the wheel
  - But try to keep your wheels aligned
  - And the pressure about right
- Engage others
- Responsibility & Expertise:
  - You don’t need a meteorologist to tell you it is snowing
  - But if you want to know the details (“Did we break the record?”) it helps to have someone assigned to keeping track of things
Actual Final Thoughts: Getting Help

- American Evaluation Association
  - http://www.eval.org/
- Call us
  - Faculty & students may be able to help
- Consider contracting with professional evaluators
  - AEA has a directory

Summer reading ➔

What Counts as Credible Evidence in APPLIED RESEARCH and EVALUATION PRACTICE?
Thank you!

Questions & Discussion...