Creating a Compelling Case for Training: Decision-Based Evaluation

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Overview

- Background on evaluation – how we got to where we are today
- The Decision-Based Evaluation model
- An applied example
- Summary – Five things you need to know about evaluation
A Brief History of Evaluation

- Pre-1950
- Kirkpatrick’s contribution
- Revisions to the Kirkpatrick Hierarchy
  - AHA 10 levels
  - STEC 7 levels
  - Decision-based evaluation model
Kirkpatrick’s Hierarchy

- **Reaction**: How well did the conferees like the program?
- **Learning**: What principles, facts, and techniques were learned?
- **Behavior**: What changes in job behavior resulted from the program?
- **Results**: What were the tangible results of the program in terms of reduced cost, improved quality, improved quantity, etc.?
What’s Wrong with Levels?

- Nothing in that…
- Everything in that…

- Does using higher levels result in more compelling evaluations?
Decision-Based Evaluation
- Kraiger (2002)
**Decision-Based Evaluation Model**

- Unique features
  - Comprehensive set of decisions
  - Decisions guided by clarity of purpose
  - Accounts for different audiences
  - Comprehensive set of evaluation outcomes and recommendations for measures or measurement strategies
**DBE Components**

- Evaluation purpose
- Planning for obstacles
- Evaluation content
- Evaluation design
Purpose for Evaluation

“What is the purpose for evaluation?”
- Decision-Making
  » Course retention & revision
  » Personnel
- Feedback
  » To trainees, trainers, designers
- Marketing
  » To other organizations, units w/in
  » To future trainees

“What is the push for evaluation?”

Contrast to summative v. formative feedback
Top 10 Reasons Evaluation Fails

- Lack of planning
- Assumption that training is a cost
- Lack of sponsorship
- Lack of budget
- Lack of appropriate resources
- Lack of understanding of what to measure
- Lack of focus on performance
- Invalid measures
- Lack of data collection
- Lack of data analysis and summary
Obstacles to Evaluation

- Lack of knowledge and skills
- Lack of time, resources
- Fear of outcomes
- Absence of champion/no buy-in
- Lack of all-consuming, single-minded passionate drive towards a goal
## Lee & Pershing Taxonomy

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Purpose/Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Objectives &amp; Content</td>
<td>To evaluate the program objectives with participants’ expectations and the appropriateness, structure, level, and timeliness of the program content.</td>
</tr>
<tr>
<td></td>
<td>▪ Did the content meet the stated objectives?</td>
</tr>
<tr>
<td></td>
<td>▪ Was the content up to date?</td>
</tr>
<tr>
<td>Delivery Methods/Technologies</td>
<td>To judge the appropriateness and effectiveness of delivery methods, including media/technologies.</td>
</tr>
<tr>
<td></td>
<td>▪ Was the trainer effective at answering questions?</td>
</tr>
<tr>
<td></td>
<td>▪ Were the visual aids helpful?</td>
</tr>
</tbody>
</table>
# Revised Outcomes Taxonomy

<table>
<thead>
<tr>
<th>#</th>
<th>Outcome</th>
<th>Measurement Method</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Forming concepts</td>
<td>Identifying/classifying new instances</td>
<td>• Identifying examples of statistical problems that can be solved using ANCOVA</td>
</tr>
<tr>
<td>3.2</td>
<td>Reasoning from concepts</td>
<td>Drawing conclusions, recognizing obstacles</td>
<td>• Explaining why anecdotal stories can be used for ROI</td>
</tr>
<tr>
<td>3.3</td>
<td>Using procedures</td>
<td>Performing procedures</td>
<td>• Designing a trainee rating form to assess perceived utility of training</td>
</tr>
</tbody>
</table>
## Organizational Payoffs

<table>
<thead>
<tr>
<th>Focus of Evaluation</th>
<th>Description</th>
<th>Example: Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Performance Effectiveness</strong></td>
<td>Evaluation of the impact of knowledge and behavior to job performance.</td>
<td>Estimated % increase in performance: Bassi and Ahlstrand (2000)</td>
</tr>
<tr>
<td>Unit Impact</td>
<td>Evaluation of the whether improved job performance results in tangible outcomes to the workgroup, office unit or organization.</td>
<td>Reduction in driver accidents and injuries following a safe driving course: Phillips (1996)</td>
</tr>
</tbody>
</table>
### “True” Experiments

<table>
<thead>
<tr>
<th></th>
<th>Trained</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-test</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Random assignment of employees to conditions
- Pre/Post measures
- Rules out many alternative explanations
- *Rarely* done
## Rolling Group Design*

<table>
<thead>
<tr>
<th>Time</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>Pre-Measure</td>
<td>Training</td>
<td>Post-measure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td></td>
<td>Pre-measure</td>
<td>Training</td>
<td>Post-measure</td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td></td>
<td></td>
<td>Pre-measure</td>
<td>Training</td>
<td>Post-measure</td>
</tr>
</tbody>
</table>

*Quinones & Tonidandel (2004)
Applying the DBE Model

Example: Training in Family Engagement in Case Planning and Case Management

The trainee will understand the dynamics of engaging families in a mutual family assessment, and comprehensive case planning that includes an assessment of risk/safety factors, underlying contributing factors to maltreatment, and extensive exploration of family strengths and resources.

The trainee will develop with the family appropriate, time limited case goals and objectives, and formulate observable, behavioral measures of these goals and objectives, and outline all parties’ agreed upon roles, responsibilities, and activities within required time frames.

The trainee will value the importance of engaging and collaborating with the family and their resources in strength-based, culturally competent ways towards developing a comprehensive, family-specific assessment and case plan.
**Sample Objectives**

- **K1.** The trainee understands the importance of comprehensive family assessment (including assessments of educational and mental health needs) and case planning as the foundation of casework processes.

- **K2.** The trainee knows strategies to engage clients in constructive casework relationships and can use these relationships to promote joint case planning and resource utilization.
Sample Objectives

Given a case scenario, the trainee will be able to identify an appropriate goal and concurrent plan for the case plan.

– Trainee will individualize case plans to unique strengths and needs of each family, and identify goals that are jointly formulated and agreed upon by the trainee and the family.
Sample Objectives

- The trainee understands the change process is more likely to be successful when trainees partner with families and the community in the case planning process.
- The trainee understands a family-centered approach to practice increases family members’ investment in the change process.
Applying the Model

- Lay the foundation
  - Identify purpose for evaluation
  - Evaluate all audiences for results
  - Marshall resources for evaluation
  - Identify obstacles

- Choosing content

- Creating research design
Design considerations

- Think evidence, not proof
- Control groups help, but aren’t crucial
- Alternatives to true control groups
  - Rolling group design
  - Good pre-measures
  - Internal referencing strategies
- What would Sandy Koufax do?
Illustrative Example of IRS

Pre-Test Post-Test

[Bar chart showing comparison between Pre-Test and Post-Test results for Relevant and Irrelevant categories]
Applying the Model

- Implement evaluation
  - Collect data
  - Conduct analyses
- Presenting evaluation data
Impact Evaluation

CONTENT

“Levelese”

Targets

What to measure

DESIGN

Isolating impact

Convincing others

CONTENT

Getting to the table

Having impact
The Case for Training

- We go after valued competencies related to business objectives (by consensus)
- We used our most effective training methods (that you participated in)
- We did this in a way that used less resources than in the past (by design)
5 Things You Have to Know About Evaluation

- You already know what to measure
- "Better" data come from better designs, not better measures
- Training evaluation experts need to learn to be more persuasive, not better at measuring
5 Things You Have to Know About Evaluation

- Estimating ROI or building chains of evidence will require you to make a large set of assumptions.
- It is critical to understand and apply differences among having an impact, demonstrating effectiveness, and improving efficiency.