A Collaborative Approach to Building Evaluation Capacity among Graduate Nutrition Education Students Using *JNEB* GEMs

Marissa Burgermaster, PhD
Department of Biomedical Informatics
Columbia University Medical Center
mb3381@cumc.columbia.edu
How does “evaluation” make you feel?
“Just get it done.”
Why do we have EVALU PHOBIA?

• Past experiences, especially during schooling or in the workplace
• Emphasis on mature programs and rigorous causal designs in university settings
Resource-intensive evaluations are not always appropriate for programs delivered by entry-level nutrition educators.

Can learning more about evaluation improve attitudes and self-efficacy?

- 90-minute evaluation seminar + readings
- Applying knowledge in a collaborative activity
Lecture + readings

- Value of evaluation in nutrition education
- Appropriate evaluation by program stage
- Types of evaluation
- Strategies for integrating context and participant voices in evaluation
Collaborative activity

1. Each group of 3-4 students was presented with a “Great Educational Material” from JNEB with the evaluation section hidden under a flap.

2. Based on program description, groups planned how they would evaluate the program.

3. Groups compared their approach and the published evaluation.

4. Groups shared their program, evaluation, and comparison with the class.
Learning about evaluation improved attitudes and self-efficacy.
Do you consider yourself an evaluator?

Pre
- Yes
- No

Post
- Yes
- No
Acknowledgements

This study was conducted at Teachers College Columbia University and was designated exempt by the Teachers College IRB.

Special thanks to:
Isobel Contento
Jennifer Brown Urban
Thomas Archibald
William Trochim
Monica Hargraves
Virginia Carraway-Stage
Scott Perez-Fox of Starship Designs (www.strshp.com)
Evaluating Nutrition Education
Marissa Burgermaster

Objectives
Students will be able to:
• Articulate the value of program evaluation in the field of nutrition education
• Describe the benefits and drawbacks of using a hierarchy of evidence
• Suggest appropriate evaluation designs for different programs
• Compare and contrast formative, process, and outcome evaluation
• Analyze how implementation and contextual factors can be integrated in an evaluation
• Identify strategies for including participant voices in evaluation
• Apply principles from “evolutionary evaluation” and “comprehensive approach to process evaluation” in their own nutrition education projects

Readings

Key questions:
• Why evaluate?
• What are the various connotations of the word, “evaluation”? How does evaluation make people feel? Why is this important to acknowledge?
• How should nutrition education be evaluated?
• When should we use the hierarchy of evidence and the comprehensive approach to process evaluation in nutrition education? Are they mutually exclusive? Should all nutrition education evaluations incorporate any or all of them?
• How can you use evaluation in your work as a nutrition educator?
<table>
<thead>
<tr>
<th>Program Evolution</th>
<th>Phase</th>
<th>Evaluation Evolution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initiation</strong></td>
<td>I-A</td>
<td>Examines implementation, participant and facilitator satisfaction. Uses process and participant documentation and assessment and post-only evaluation of reactions and satisfaction.</td>
</tr>
<tr>
<td></td>
<td>I-B</td>
<td>Focuses on implementation, and increasingly on presence or absence of selected outcomes. Evaluation is post-only; outcome measures may be under development with attention to internal consistency (reliability).</td>
</tr>
<tr>
<td><strong>Development</strong></td>
<td>II-A</td>
<td>Examines program’s association with change in group outcomes, for these participants in this context. Uses unmatched pre- and post-test of outcomes, quantitative/qualitative assessment of change, assessment of measure reliability and validity.</td>
</tr>
<tr>
<td></td>
<td>II-B</td>
<td>Examines program’s association with change in group (and/or individual) outcomes, for these participants in this context. Uses matched pre- and post-test of outcomes, quantitative/qualitative assessment of change, verifying measure reliability and validity.</td>
</tr>
<tr>
<td><strong>Stability</strong></td>
<td>III-A</td>
<td>Assesses effectiveness using design and statistical controls and comparisons (control groups, control variables or statistical controls).</td>
</tr>
<tr>
<td></td>
<td>III-B</td>
<td>Assesses effectiveness using controlled experiments or quasi-experiments (randomized experiment; regression-discontinuity).</td>
</tr>
<tr>
<td><strong>Dissemination</strong></td>
<td>IV-A</td>
<td>Examines outcome effectiveness across wider range of contexts. Multi-site analysis of integrated large data sets over multiple waves of program implementation.</td>
</tr>
<tr>
<td></td>
<td>IV-B</td>
<td>Formal assessment across multiple program implementations that enable general assertions about this program in a wide variety of contexts (e.g., meta-analysis).</td>
</tr>
</tbody>
</table>

Integrating context and participant voices