Plan and Assess: The Basics of Learning Outcomes and Survey Development

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Plan & Assess

The Basics of Learning Outcomes & Survey Development

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Modified slides available at: works.bepress.com/ldlong
Learning Outcomes

As a result of this program, participants will be able to:

- write and evaluate learning outcome statements
- state and identify at least five typical errors in questionnaire development
Overview

- Learning Outcomes
- Questionnaire Development
- Learning by Doing - 2 Activities
Learning Outcomes

What should students/staff learn as a result of your program?
Learning Reconsidered 2 Overview

- Learning occurs everywhere
- Finding Self v. Career preparation
- Help students reflect & make meaning
- Learning outcomes assist in guiding learning
LR2 Continued

- Learning should occur in the following areas:
  - Cognitive Complexity
  - Knowledge acquisition & Integration
  - Humanitarianism
  - Civic Engagement
  - Interpersonal & Intrapersonal Competence
  - Practical Competence
  - Persistence & Academic Achievement
What is a Learning Outcome?

• A concrete action that one demonstrates as a result of learning.
• It’s a demonstration of knowledge, a skill, or a value.
• Learning outcomes are statements of intentionality/purpose.
• They guide efforts to move someone from point A to point B as a result of that learning experience.
Importance of a Learning Outcome

- Help others understand what we do
- The basis for delivering content, activities, assessments... everything.
- Guide the planning of activities and assessments for further growth in that area.
- Driving force that supports what, why and how we do things in our field
Goals vs. Learning Outcomes

**Goals** are often broad, somewhat abstract statements of what we want to do or be able to do.

Example - “Everyone in the chapter will be great leaders.”

**Learning Outcomes** are explicit statements of what one should be able to do or know after participation.

Example – “After participation in this workshop, students will be able to better identify, understand and discuss issues relating to not only their chapter but also the community.”
How to Write Learning Outcomes

• Start with mission
• Determine your process:
  • Draw a target & aim
  • Draw targets around your shots
• Make sure LO’s are measurable
• Bloom’s Taxonomy
<table>
<thead>
<tr>
<th>Skill</th>
<th>Sample Prompts</th>
<th>Purpose</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remembering</td>
<td>recognize, list,</td>
<td>memorize and recall facts</td>
<td></td>
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<tr>
<td></td>
<td>describe,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>identify, retrieve,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding</td>
<td>describe, explain,</td>
<td>understand and interpret meaning</td>
<td>LOWER</td>
</tr>
<tr>
<td></td>
<td>estimate, predict</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applying</td>
<td>implement, carry out,</td>
<td>apply knowledge to new situations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>use, apply, show,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>solve</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analyzing</td>
<td>compare, organize,</td>
<td>break down or examine information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>cite differences,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>deconstruct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluating</td>
<td>check, critique,</td>
<td>judge or decide according to a set of</td>
<td>HIGHER</td>
</tr>
<tr>
<td></td>
<td>judge hypotheses,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>conclude, explain,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creating</td>
<td>design, construct,</td>
<td>combine elements into a new pattern or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>plan, produce</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Writing Outcome Statements

- **Audience** - Who is doing it?
- **Behavior** – What are they doing?
- **Condition** – When will they do it?
- **Degree of Achievement (may be omitted)** – How will you know they did it?

Heinich, Molenda, Russell, & Smaldino (2002).
Learning Outcome Example

By participating in the Be Spartan Green program,

students will implement at least three methods to

reduce waist and conserve energy as defined in

the Student Green Pledge.
Activity

In small groups, write 2 to 3 learning outcome statements for your students/staff
Questionnaire Development

Are you asking the right questions in the right way?
Writing Survey Questions

- Question Structure
- Principles for Writing Survey Questions
- Assessing Survey Questions
- Activity
Survey Research

“There is one truth. We just have to find it.”
Writing Survey Questions

Begin with the end in mind:
What do you want to do with the results?
How will you analyze/report the results?
What are the potential implications?
Reliability and Validity

**Reliability:** Are measures repeatable/consistent?

**Validity:** Does the instrument measure what it is supposed to measure?
Validity

Research suggests that self-report data are likely to be valid under five conditions:

1. The information is known to respondents;
2. The questions are phrased clearly and unambiguously;
3. The questions refer to recent activities;
4. The respondents think the questions merit a serious and thoughtful response; and
5. Answering the question does not threaten, embarrass, or violate the privacy of the respondent or encourage the respondent to respond in socially desirable ways.

(Kuh, 2001; Pike et al., 2012)
Validity

Membership:

☐ Fraternity

☐ Sorority
Question Structure

- Three main questions types:
  - Open-ended
  - Closed-ended, ordered
  - Closed-ended, unordered
Question Structure

- Open-ended
  - May solicit short and long responses
  - Answers are qualitative in nature

How can this presentation be improved?

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
Question Structure

- Closed-ended, ordered
  - Use ordered categories
  - Likert scale

To what extent do you agree or disagree with the following statement. “My leadership skills improved as a result of my fraternity/sorority experience.”

- [ ] Strongly Agree
- [ ] Agree
- [ ] Disagree
- [ ] Strongly Disagree
- [ ] No Opinion
Question Structure

- Closed-ended, unordered
  - Respondents must compare responses
  - Creating the categories can be challenging

What is your favorite educational program?

- Bystander Intervention training
- Leadership training
- Greek 101
- Other
- I don’t have a favorite educational program
- I haven’t attended an educational program
Principles for Writing Questions

- Dillman (2007) provided 19 principles
- The principles may be contradictory – choose the best option
Principles for Writing Questions

- Avoid bias from unequal comparisons

Which entrée do you like the most?

☐ Our tasty chicken parmesan
☐ Beef stew
☐ Tuna casserole
Principles for Writing Questions

- State both sides of attitude scales in the question stems

  Do you agree Ball State should have a smoking ban?

  To what extent do you agree that universal health care should be afforded to everyone?
Principles for Writing Questions

- Develop response categories that are mutually exclusive
Principles for Writing Questions

- Avoid asking respondents to say yes in order to mean no

  Do you disagree with the following statement: “Eating McDonald’s every day is good for you.”

  □ Yes
  □ No
Principles for Writing Questions

- Avoid double-barreled questions

Do you believe Greek students are more involved and more academically proficient than their non-Greek counterparts?

☐ Yes
☐ No
Assessing Survey Questions

- Dillman (2007) provided eight questions to ask oneself to assess the quality of survey questions.
Assessing Survey Questions

1. Does the question require an answer [from every participant]?
   - If you attended the opening ceremony, how well did you like the keynote speaker?
     - □ Very much    □ somewhat    □ not much    □ not at all

2. To what extent do survey recipients already have an accurate, ready-made answer for the question they are being asked to report?
   - How many siblings do you have?    ________ siblings
Assessing Survey Questions

3. Can people accurately recall and report past behaviors?

How often did you engage in community service last spring?

☐ frequently   ☐ often   ☐ seldom   ☐ never

4. Is the respondent willing to reveal the requested information?

Have you ever filed bankruptcy?

☐ Yes   ☐ No
Assessing Survey Questions

5. Will the respondent feel motivated to answer each question?
   - Survey that looks overwhelming
   - Can be a problem with open-ended questions

6. Is the respondent’s understanding of response categories likely to be influenced by more than words?
   - Response categories
Assessing Survey Questions

7. Is survey information being collected by more than one mode?

8. Is changing a question acceptable to the survey sponsor?
Activity

How can the following survey questions be improved?
Activity

What is your class standing?

- [ ] 1\textsuperscript{st}-year undergraduate
- [ ] 2\textsuperscript{nd}-year undergraduate
- [ ] 3\textsuperscript{rd}-year undergraduate
- [x] 4\textsuperscript{th}-year undergraduate
Activity

8. How many Greek organizations do you believe are represented on Washburn's campus?
   □ 6   □ 11   □ 17   □ 23   □ 31

9. How many sororities do you believe are represented on Washburn's campus?
   □ 2   □ 7   □ 8   □ 9   □ 13

10. How many fraternities do you believe are represented on Washburn's campus?
    □ 4   □ 7   □ 10   □ 14   □ 20
Activity

On average, how many hours per week do you commit to service?

☐ 0 hours
☐ Less than 5 hours
☐ 5 – 10 hours
☐ 11 – 15 hours
☐ 16 – 20 hours
☐ 21 or more hours
Activity

Do you believe that Greek students at Shippensburg “party” more than non-Greek students?

☐ Yes
☐ No
Activity

To what extent has your fraternity/sorority experience enhanced your ability to identify and solve problems
Tying everything together

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Poll:
http://www.polleverywhere.com/multiple_choice_polls/MTM2MzE3OTE1
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• Learning by Doing - 2 Activities

Any Questions?

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