Assessment 101: Providing Evidence of Your Impact

Sarah Gordon, Ph.D
Assistant Professor
Research, Evaluation, Measurement, & Statistics
Oklahoma State University

Making my debut as: Associate Professor, Center for Leadership & Learning
Arkansas Tech University
Session 1: Assessment vs. Evaluation, Learning Outcomes, & Mapping
Introductions

• Name
• Title
• Areas under your purview
• What do you hope to gain from this session?
Student affairs staff members need to have more than programs, activities, and experiences they think would contribute to student learning. They need to have the empirical evidence to be confident that these programs, activities, and experiences actually do contribute to student learning.

(Shuh & Gansemer-Topf, 2010, p. 12)
Assessment = Information = Power

• Information is power
  • Think about what we’re doing in an informed way
  • To make changes to what we’re doing
  • Provide evidence of our success
  • Turn ordinary into extraordinary
The assessment process facilitates the differentiation between what we want to do/where we want to go and how we will get there.
ASSESSMENT, RESEARCH, & EVALUATION
Assessment vs. Evaluation

• Assessment
  • In higher education, focuses on **student learning**
    • The process of gathering, analyzing, and interpreting data for the purpose of evaluating educational impact and improving student learning and development
  • Method of obtaining information about the achievement or abilities of students
  • Results are usually program and/or institutionally specific
  • The process of *documenting*
  • Focus of measurement tends to be process-oriented (formative)
  • Diagnostic
    • An important tool that facilitates discussion about programs and provides useful information to guide continuous improvement
    • A continuous process (a cycle!) of gathering and using data to determine what is working and what is not

Adapted from
www.binghamton.edu
www.uky.edu
Assessment vs. Evaluation

• Evaluation
  • Using data to judge the worth, merit, or effectiveness of something
    (Fitzpatrick, Sanders, & Worthen, 2011, p. 7)
  • Results may have broader implications; use of results is more important than generalizability
  • Tends to be more prescriptive, in the sense that evaluations are often conducted based on standards (which are sometimes externally developed)
  • Less flexible, tends to follow prescribed plan above
  • May include assessment, but also includes other data, measures, and inputs
  • Focus of measurement tends to be product-oriented (summative)
  • ‘Judgmental’ (see definition above)
  • Any effort to gather, analyze, and interpret evidence which describes institutional, departmental, divisional, or agency effectiveness
    (Upcraft & Schuh, 1996, p. 18)

Adapted from
www.binghamton.edu
www.uky.edu
So...

• When we wear our **assessment** hats, we are thinking about the measurement of student learning so that we can improve learning experiences or collect better data around what and how students have learned.

• When we wear our **evaluation** hats, we are thinking about needs (students, staff, & university), effectiveness, satisfaction, resource allocation, communication, customer service, change management, and systems development.

• When we wear our **research** hats, we are thinking about contributing to generalizable knowledge, broader applications of results, and implications for the field.
STUDENT LEARNING OUTCOMES
Student Learning Outcomes (SLOs)

• Answer the question:
  ‘What should students be able to do after this program/experience that they couldn’t do before?’

• Specify what students will learn or accomplish as a result of an activity; usually expressed as specific knowledge, behavior, skills, or attitudes
  • Do not just describe what happens in the program

• Can be measured
When Writing SLOs...

- Consider:
  - In what way do I want students to grow?
  - What do I want students to learn or do?
  - What knowledge, skill or abilities should the ideal student participant demonstrate?
  - How will students be able to demonstrate what they learned?

The following statement may get you started:

- As a result of participating in (program or experience), students should be able to (action verb) + (defined by explicit and observable terms).
Good SLOs

• A learning outcome is a complete sentence.
• The verb is the ‘center’ of the statement, and it describes what the student *does*.
  • The discipline often drives the verbs invoked.
• Can be applied to a formative task (competence) or a summative judgment (proficiency).
• Do not indicate a quality the student holds or may hold prior to learning.
• Are not something demonstrated after the student leaves the authority of the credentialing institution.
• Are specific so that students will know precisely what they are expected to do with respect to *what*.
• Does not rely on the proxies of course completion, attendance, or GPA (these don’t have anything to do with the specifics of student learning).

From Adelman, 2015
ABCDs of Effective and Measurable SLOs

• **Audience/Participant** - Students
• **Behavior** - what I want students to learn, do, or accomplish
• **Condition** – the program or service
• **Demonstration of Achievement** - product (what do the students produce; data)

http://sites.uci.edu/saslo/files/2014/06/SALO-2012-PDF.pdf
Examples of SLOs

• Students participating in the Alcohol Education Program will describe two health issues related to university students involved in substance abuse and write a plan of action to address one issue.
  • Measurement: Essay/Action Plan, Pre-Post test

• By the conclusion of the Peer Mentor Training, students will demonstrate knowledge of three social issues or problems facing university students by discussing them in an oral presentation.
  • Measurement: Oral presentation, post test, essay

• As a result of meeting with a career specialist, students will be able to develop a plan of action to choose a major or career.
  • Measurement: Action Plan

Adapted from http://sites.uci.edu/saslo/files/2014/06/SALO-2012-PDF.pdf
These are not learning outcomes...

- The program will offer opportunities for students to master integrated use of information technology.
- The program will engage a significant number of students in a discussion of diversity issues.
- Students who participate in critical writing seminars will write two essays on critical thinking skills.
- Students will be exposed to exceptionality in learning disabilities including visual and perception disabilities.
- Students will be presented with information about resources.
- Students who participate in this program will have a higher retention rate than students who did not participate.

Adapted from http://www.gavilan.edu/research/spd/Writing-Measurable-Learning-Outcomes.pdf
Concept/Outcome/Curriculum Map

• Diagram that shows how activities/programs are connected to learning outcomes

• Very helpful in providing a visual representation of how learning outcomes are presented, reinforced, and mastered, as well as opportunities for collecting data regarding achievement of learning outcomes
  • Shows areas of strength as well as gaps/areas for improvement
Curriculum Map for Business BA Program

<table>
<thead>
<tr>
<th>Courses and Learning Activities</th>
<th>Critical Thinking</th>
<th>Written Communication</th>
<th>Oral Communication</th>
<th>Quantitative Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS1205 Statistics &amp; Data Analysis</td>
<td>I</td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>BUS1206 Financial Accounting and Reporting</td>
<td>I</td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>BUS2201 Strategy</td>
<td></td>
<td>P</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>BUS2203 Operations</td>
<td>P</td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>BUS2211 Managerial Accounting</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS2214 Marketing</td>
<td></td>
<td>P</td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>BUS2251 Organizational Theory</td>
<td>R</td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>BUS2264 Managerial Economics</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Legend:**
- **I**: Introduced
- **P**: Practiced
- **R**: Reinforced
<table>
<thead>
<tr>
<th>Services, Programs, and/or Experiences</th>
<th>Learning Outcome 1</th>
<th>Learning Outcome 2</th>
<th>Learning Outcome 3</th>
<th>Learning Outcome 4</th>
<th>Learning Outcome 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key:
- I = introduced
- R = reinforced / opportunity to practice
- M = mastery
- A = assessment opportunity (i.e., assessment evidence/data collected)
- A* = potential assessment opportunity (i.e., opportunity to collect assessment evidence/data that is not currently being utilized)
<table>
<thead>
<tr>
<th>Services, Programs, and/or Experiences</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply what it means to be a Cowboy at Oklahoma State University through participation in campus traditions and being able to accurately complete a crossword puzzle of campus traditions.</td>
<td>Engage in networking with students of various classifications through participation in small group time and completion of a making connections grid.</td>
</tr>
<tr>
<td><strong>Small Group Time</strong></td>
<td>I</td>
</tr>
<tr>
<td><strong>Challenge Course</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Community Service Project</strong></td>
<td>R</td>
</tr>
<tr>
<td><strong>Campus Resource Clue Quest</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Pete's Traditions Night Campfire</strong></td>
<td>I, A* (direct)</td>
</tr>
</tbody>
</table>
Charting SLOs and Methods

**Program**

Mock Interview Days

**SLOs**

- Following Mock Interviews, students will identify three other career development that OSU offer students.
- Students will evaluate their self-efficacy and preparedness for the job market.
- Students will explain how their current experiences prepare them for a position in the career field of their choice.
- Students will review their own experiences and identify at least one missing experience from their resume.
- Students will devise new strategies to increase their preparedness after receiving feedback with an employer.

**Methods**

- Crossword Puzzle
- Rubric
- Pre/Post Questions
- Reflection Postcard
Let’s Brainstorm!

• See handout...
Session 2: Co-Curricular Programs, Direct & Indirect Measures, and Assessment Plans
How do I know if I have a co-curricular program?

• Consider:
  
  ✓ **Intentionality**: Is the program designed to promote student learning or development or give students the opportunity to apply their learning in new situations?

  ✓ **Claims**: Do you (or your institution) make claims that your program results in learning or contributes to an enriched educational environment?

  ✓ **Outside the Classroom**: Is the program offered outside the formal classroom?

• If yes to all, you are running a co-curricular program, and you should be assessing student learning/development.
Assessing Student Learning vs. Evaluating a Program

• Asking a program that has little or no role in student learning to assess student learning leads to frustration and results in a poor cost/benefit ratio.
  • What we are trying to avoid!

• Programs not connected directly to student learning should focus on program evaluation and operational effectiveness, not student learning.
  • Evaluation of operational effectiveness includes:
    • Participation assessment
    • Cost effectiveness
    • Satisfaction
    • What the department/program wants to achieve as a benchmark for itself

• Some programs may choose to do both evaluation and assessment

Adapted from Penn, 2015
BUT....don’t assess everything!

• It can be overwhelming, impractical, and not useful

• Instead, work with your colleagues to determine what should be assessed.
  • For example:
    • Programs/activities that cost $____
    • Programs/activities that involve collaboration with another department, unit, or division
    • Signature programs/activities for your department
    • Programs with ____ number of participants

• Develop a plan, and remember plans can change.
  • Assessment leads to program improvement!
DATA COLLECTION:
DIRECT AND INDIRECT MEASURES
Direct vs. Indirect Assessment

- **Direct Measures**
  - Collect data/evidence on students' actual behaviors or products
  - Require students to display their knowledge and skills (Palomba & Banta, 1999)

- **Indirect Measures**
  - Gather information about student learning by looking at indicators of learning other than student work output
  - Learning is *inferred* instead of supported by direct evidence; **students reflect on learning rather than demonstrate it** (Palomba & Banta, 1999)
  - Helps find out about the quality of the program/learning process by getting feedback from the student or other persons who may provide relevant information
  - Based on opinions or perceptions
  - Are helpful when determining if a student likes or enjoys an event, activity, or program, but not in conveying if they learned something

References:

https://manoa.hawaii.edu/assessment/resources/definitions.htm
Direct Assessment

Examples include:

• Student work scored with a rubric (e.g., capstone experiences, papers, portfolios, performances, etc.)
  • To score participation in Behind Closed Doors
  • To review a resume
  • To review a portfolio of work from Student Government officers
  • To assess an oral presentation/discussion

• Some tests and exams (assuming they measure the outcome)
  • Note: Assessment and course grades/GPA are not usually the same thing
  • Using a pre-post test before and after a training workshop
  • Completing a crossword puzzle after a program/presentation

https://manoa.hawaii.edu/assessment/resources/definitions.htm
Indirect Assessment

Examples include:

- Surveys/questionnaires (NSSE, BCSSE, etc.)
- Interviews
- Focus groups
- Placement rates
- Alumni surveys
- Satisfaction surveys (e.g., student, alumni, employer, etc.)
- Honors, awards, scholarships, publications
- Anything that captures students' perceptions of learning or the program being assessed (need assessments, preferences, opinions)
- Note: Attendance alone ≠ assessment
EXAMPLES
Career Services
Complete the crossword below

Word Bank
ResumeDoctor; Salary; ThankYouNotes; ProfessionalDress;
HireOSUGrads.com; Questions; LinkedIn; CareerFairs

Across
4. An event that Career Services puts on that helps students with their resumes. (resumedoctor)
5. An event that Career Services puts on that helps students create a brand on a professional social media account. (linkedin)
6. Consists of suits, blouses, and pants. Appropriate colors are black, gray, and blue. (professionaldress)
7. An event that Career Services puts on that helps students find jobs and internships for their future careers. (careerfairs)

Down
1. A system that Career Services provides to help students find on and off campus jobs. (hireosugrads.com)
2. This is something that you should always have prepared when going into an interview. (questions)
3. After the interview, this is a way to show your appreciation in paper or email form. (thankyounotes)
4. Something that should not be brought up in an interview setting. (salary)

Please identify three career development events that OSU offers:
1. 
2. 
3. 

q
h
r
u
l
i
s

t
s
t
u
n

4

5

6

7

8

Career Fairs
Professional Dress
LinkedIn
Resume Doctor
Salary
Thank You Notes
Hire OSU Grads.com
Questions
MOCK INTERVIEW DAYS
Sponsored by OSU Career Services

POSTCARD TO REFLECT
1. After meeting with an employer what Skills/Experiences would you want to add to your resume for your future career?

2. List three new strategies that you will use to increase your interview abilities?

YOUR CWID HERE:

---

Career Events

POSTCARD TO REFLECT
1. After meeting with an employer what Skills/Experiences would you want to add to your resume for your future career?

2. List three new strategies that you will use to increase your interview abilities?

YOUR CWID:
VALUE Rubric

• See handout
Other Ideas

• Apply a rubric to a deliverable, such as:
  • A skit or performance (creative thinking)
  • A resume (could rate before and after edits)
  • A student-written action plan
  • Journaling, reflections, or “how does this apply” activities
  • Six word essays (can be done in person or via social media using a selected hashtag)
  • Photo documentation

• Rating of skills via observation/interaction, such as:
  • Behind Closed Doors training
  • Mock interviews

• Pre and post tests
TIPS TO HELP WITH PLANNING...
Pitfalls to avoid in assessment

Adapted from Jim Fullmer, University of Arkansas at Little Rock

The Inevitability Trap
“What I do cannot be measured.”
“I don’t have the time or expertise.”
“It’s not my job.”

I Taught It, So They Must Have Learned It
“Assessment measures our success in teaching by examining student learning.”

Data Inundation / The More Outcomes, the Better!
Measuring everything that moves!

Blame Game
Blaming other instructors/staff for what the students don’t know.

“Gotcha”
Using assessment to highlight the negative or reveal ‘bad apples.’

“CASE”
Copy And Steal Everything

The “All Aboard” Game
Requiring everyone to love assessment.

Accountability Thinking
“Assessment is only for reporting.”

The Data Paperweight
Failing to do anything with data once it is collected.

The “Change Trap”
“Assessment must result in change.”

The Perfection Fallacy
“Your instrument is flawed, therefore I’m not going to listen to your results.”
“We’re waiting until our plan is perfect before beginning.”

Two Most Asked Questions in Assessment:
1. Why do I have to do this?
2. When is it going away?

Overriding Principles in Assessment
1. To make it work, keep it simple.
2. Keep planning and improvement first.
Assessment Plans

• Should Contain:
  • Name of Program
  • Contact info for responsible party
  • Purpose, goals, and objectives of the program; typical participation #
  • Program type
  • Student learning outcomes (rule of thumb: no more than 5, and 5 is a lot!)
    • How many students will be assessed in each SLO?
    • How will students be sampled for each SLO?
    • What assessment method will be used to collect data for each SLO?
    • How will the assessment for each SLO be implemented, administered, or conducted?
    • Is there a goal set for each SLO? (ex: 80% of students included in the assessment will score a 3 or higher on the rubric)
  • Assessment timeline
    • When does program start?
    • When will data be collected?
    • When will data be analyzed?
    • When will findings be discussed? With whom?
    • When will a report be issued? To whom?
Sufficiently Supporting Assessment: What NOT to Do

- Let one person do all the work
- Involve one or two people so assessment is done in a vacuum and no one else knows what is going on
- No resources (human, financial, technological, time) are available to support assessment
- Focus only on compliance
- Assess everything

Penn, 2015
Sufficiently Supporting Assessment: Best Practices

- Give assessment a home
  - A committee, point person, regular discussion, standing agenda item, etc.
- Rotate membership on assessment committees and delegate out assessment responsibilities to more than one person/the same group of people
- Have a process for determining what will be assessed
- Link assessment and planning
- Provide staff with professional development opportunities related to assessment
  - Conferences
  - Webinars
  - Mentoring
  - Listservs
Sufficiently Supporting Assessment: Best Practices

- Create a division or department template for assessment plans and reports
- Include assessment as a formal job responsibility on job descriptions
- Obtain technology tools and licenses
  - Campus Labs, Qualtrics, Survey Monkey, etc.
- Build a relationship with your on-campus assessment leader(s)
- Collaborate on projects
  - Across the division
  - With faculty
- Have processes for feedback and coaching
- Regularly meet to discuss results
- Celebrate successes
Questions?

- **Handouts:**
  - Key Terms
  - Resources
  - VALUE Rubrics

- **Contact Info:**
  Sarah Gordon
  P: (479)964-3208
  sgordon6@atu.edu
  CLL Annex