ASSESSMENT—THE BASICS

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Student Affairs Research and Evaluation
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Special Thanks

To the units in Student Affairs who gave me permission to use their work in assessment as examples for this workshop.
What you said . . .

- Learn methods of disaggregating data and for verifying significance
- Helping me learn more about setting up our plan
- Gain more insight into how I can assess what I am doing and/or how I can help others in my department
- How to make our assessment better and add in another program
- Setting up the plan and identifying opportunities to apply the plan throughout the year
- Ideas, next steps in learning from this year’s plan and transitioning into an additional measure, additional outcomes
Some Definitions

- **Assessment. . .**

  . . . the systematic collection, review, and use of information about programs/services undertaken for the purpose of improving student learning and development.

  (adapted from Palomba & Banta, 1999)

  “a rich conversation about students and student learning informed by data.”

  (adapted from Ted Marchese – AAHE)
Assessment: An Iterative Process

Mission
Goals
Intended Outcomes

Teach/Program/Serve

Did that work? Did students learn?

What info do you need

Gather the info

Make meaning of the info

Feed info back into planning

Adapted from Peggy Maki, PhD by Rebecca Sanderson, PhD

Sanderson, 2011
Assessment must be . . .

- **Understood**—by faculty, students, staff
- **Inclusive**—involve people and faculty driven
- **Meaningful**—to those doing the assessment
- **Manageable**—considers resources
- **Flexible**—considers learning curves
- **Truth-seeking**—ethical, objective
- **Iterative and Systematic**
- **Part of the decision-making process**

Sanderson, 2010
Mission and Goals set the context
Outcomes and Methodology set what you are looking for and how you will get it
Results - what you found
Discussion - what meaning you make of it
Actions/Follow-up what will you do

Sanderson, 2011
Assessment Planning Process

1. **Mission**—your purpose, why your unit exists
2. **Goals**—3-5 broad overarching statements—**NOT** a to do list
3. **Ask Yourself Questions** (include staff)
   1. What is the core purpose for our existence at OSU?
   2. How do we spend most of our energies?
   3. Do those activities fit our mission?
   4. Do the activities have themes? Or Unity?
   5. What are the themes?

Sanderson, 2011
The mission of XXXXX is to persuade, guide, educate, entertain and serve the OSU community and greater Corvallis area. (2003)

- Strengths? Or Weaknesses?
- What is the name of this unit?
Mission Development (example)

- XXXX is a nationally recognized program that serves as a prominent voice for student concerns and interests by connecting the students of OSU to their community. In the process of providing students a variety of platforms from which to lead, inform, and entertain the campus, XXXX gives hands-on opportunities to learn the tools and concepts of professional media. (2010)
Goals

- Describe what the program is trying to accomplish overall.
- Broad general statements that are enduring.
- Is aligned with university, division, departmental, etc. missions and goals.
- Provides departmental focus.
- Not a “to do” list.
Examples of Goals

- Provide services to prospective students and families that raise awareness of Oregon State University as a potential destination for higher education.

- Provide effective accommodations for students with disabilities based on law and/or current best practices.
Where to Start with Outcomes?

- Typically begin with Business Outcomes
  - Easier to get information typically
  - Counting
  - Contained in Banner
  - Retention rates, etc.

- Then shift to student learning outcomes
  - START SMALL
  - Make it something you can be successful measuring
Articulating Outcomes

Create **OUTCOMES** first and programs second.

- **Business Outcomes**
  - Satisfaction
  - Number of Users
  - Types of Services Used
  - Demographics of Users
  - Revenue Generated
  - Cost per Program

- **Learning Outcomes**
  - What you want learners to be able to do
    - To do
    - To think
    - To know
  - Learners must be able to demonstrate learning in some observable way

Sanderson, 2011
Business Outcomes

- What kinds of Business Outcomes have you developed?
- What kinds of programs support these?
Business Outcomes (Examples)

- EOP will increase the number of enrollees using our services by 1% each year for 5 years.

- Student Athlete Services will deliver 3% more study skills workshops.

- The Academic Success Center will increase participants in supplemental instruction sessions on math to 250 students per term.
Deciding on Learning Outcomes

- Important
- Fits with what you are trying to teach
- Fits with the depth of instruction
  - Cannot expect the same outcomes from a 1 hour presentation as you can from a term’s worth of instruction/tutoring, etc.
- Fits with the pedagogy, purpose of the instruction, etc.
Learning Outcomes (Examples)

- Sign language interpreters will demonstrate effective interpreting skills as defined by law and current best practices.

- **Program**
  - Must have completed a program of instruction and have specific level of qualification (do use interns sometimes)
  - Pair with a senior interpreter
  - Off line interpreter will watch and sometimes will take over interpreting
  - Journaling that all interpreters have access to and read for suggestions
Learning Outcome (Examples)

- As a result of attending the annual RecSports Supervisor Retreat, student supervisors will be able to use the “Sell it. Show it. Do it. Use it” model. Success is the proper use of all four components in group presentations.

- Program
  - Retreat training in model, includes practice
  - Pairing with senior supervisor for presentations
  - Observation and feedback on group presentations

Sanderson, 2011
As a result of their training and experiences working in UHDS, RA’s will be able to resolve conflicts in a just and respectful manner.

Program
- RA class
- RA fall training
- RA inservice
- One-to-one and group meetings and discussion
- Just and respectful defined in assessment materials and training materials
Writing a Learning Outcome

- **Target audience** will be able to **Bloom’s taxonomy word targeted learning**.

- Math 111 tutoring participants will be able to apply good study skills and techniques to math homework and exams.

- Bridge to Success students will be able to apply “lessons learned” in the program in order to be successful at OSU. “Lessons learned” include: time management, study skills, how to talk to faculty, etc.
Learning Outcomes Development

- What are some examples of things you want students to be able to do, think, or know because of their work with you?
Learning Activity Development

- What programs do you have or will you develop to help students reach those outcomes?
- Are there steps students must complete to reach the outcome? Or . . . do they get it all at once?
- What is your curriculum and pedagogy?
Methodology

- How to get the right information to inform your planning and decision-making.

- What are some methods you have used?
  - Surveys
  - Counting
  - Banner data
  - What else?
What Method is Best?

- Depends on:
  - What you need to measure
  - How much time and money you have
  - How you will collect the information
  - Whether subjects will do the assessment
  - How reliable or valid you need it to be
  - What tools you have available to you
  - Whether you can gain access to data that someone else has collected
  - What kind of data you want to collect
  - What else?
Direct Observations or Work Samples

- Homework, papers written, practice speeches, role plays, problem sets, etc.

- Must develop criteria for scoring beforehand
  - Check lists
  - Rubrics
Checklists

- Direct evidence of learning
- Presence or absence or frequency of a behavior or element
- Content knowledge
- Performance-based

- Need raters
- Consider inter-rater reliability

Sanderson, 2011
Learning outcome

- Following FERPA training, participants will be able to respond appropriately when asked to disclose student information.
Checklist Exercise

- As an advisor, you have access to the on-line student data system. You can access the following information about any student:
  - Grades in every course and GPA
  - Course List
  - Student financial account information

- Student ID number
- Name
- Class rank
- Current & home address
- Phone numbers
- Parent’s name & address
- Ratings on admissions information
- Financial Aid information
- Student picture
- Email address

Sanderson, 2011
Rubrics

- Direct evidence of learning
- Performance-based
- Levels of learning
- Dimensions of learning

### Giving a Campus Tour

<table>
<thead>
<tr>
<th>Dimensions of Learning</th>
<th>Novice</th>
<th>Intermediate</th>
<th>Advanced</th>
<th>Exemplary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem-solving</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of OSU</td>
<td></td>
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</tr>
</tbody>
</table>

Sanderson, 2011
Data Analysis and Results

- How will you collect the data and keep track of it?
- How will you get it into a format that allows you to analyze it?
- What additional education/consultation might you need for this?
- Report your results as documentation of what led you to make the decisions you will make.
Data Analysis and Results

- How did you make meaning of the raw data?
  - Means (average)
  - Frequency Distributions
  - Increase/decrease levels
  - Percentages
  - Themes
  - Graphs
  - Tables

- How will you show others what you found?
Example

Frequency Distribution

Preparing for class (studying, doing homework, rehearsing, etc.)

- High school reported hours/wk (BCSSE)
- Expected hrs/wk for college first year (BCSSE)
- First year college reported hours/wk (NSSE)

Sanderson, 2011
Example

- Pre-Post Assessment Survey
  - Paper
  - Had to get the paper responses into some format to calculate means, frequencies, etc.
  - Used EXCEL and entered data manually
  - Had to convert words to numbers
    - Strongly agree, Agree, Disagree, Strongly Disagree
    - Calculated means per question and graphed
Example

- Mean for each question (range 1-5)

### NCBI 1-day Workshop: August 18, 2001

<table>
<thead>
<tr>
<th>Question #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>
## Test of significance

(Are the differences in means between the pre-post questions due to chance?)

<table>
<thead>
<tr>
<th>Questions</th>
<th>Pre or Post Test</th>
<th>N</th>
<th>Mean</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am at ease with people unlike me</td>
<td>Pre</td>
<td>46</td>
<td>4.3</td>
<td>0.309</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>45</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>2. I am able to identify the benefits of taking pride in the multiple</td>
<td>Pre</td>
<td>46</td>
<td>4.1</td>
<td>0.049</td>
</tr>
<tr>
<td>components of who I am</td>
<td>Post</td>
<td>45</td>
<td>4.4</td>
<td></td>
</tr>
<tr>
<td>3. I am uncomfortable when I hear a prejudicial slur or joke</td>
<td>Pre</td>
<td>46</td>
<td>4.6</td>
<td>0.463</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>45</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>4. I understand the impact of oppression and discrimination</td>
<td>Pre</td>
<td>46</td>
<td>4.0</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>45</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>5. I am inclined to let people know that it bothers me when I hear</td>
<td>Pre</td>
<td>46</td>
<td>3.8</td>
<td>0.004</td>
</tr>
<tr>
<td>prejudicial statements</td>
<td>Post</td>
<td>45</td>
<td>4.3</td>
<td></td>
</tr>
<tr>
<td>6. I recognize my own prejudices</td>
<td>Pre</td>
<td>46</td>
<td>3.6</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>45</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>7. In most situations when discrimination is evident, I believe I can make</td>
<td>Pre</td>
<td>46</td>
<td>3.2</td>
<td>0.000</td>
</tr>
<tr>
<td>a difference</td>
<td>Post</td>
<td>45</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>8. I feel comfortable letting others know who I am - even if I am</td>
<td>Pre</td>
<td>46</td>
<td>3.6</td>
<td>0.003</td>
</tr>
<tr>
<td>&quot;different.&quot;</td>
<td>Post</td>
<td>45</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>9. I trust people will fully accept me as ME!</td>
<td>Pre</td>
<td>46</td>
<td>3.3</td>
<td>0.042</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>45</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>10. I am personally committed to work toward eliminating discrimination</td>
<td>Pre</td>
<td>46</td>
<td>4.4</td>
<td>0.016</td>
</tr>
<tr>
<td>and mistreatment of oppressed groups on this campus</td>
<td>Post</td>
<td>45</td>
<td>4.8</td>
<td></td>
</tr>
</tbody>
</table>

Shaded areas are significant—differences are not due to chance

Sanderson, 2011
Discussion and Sharing

- Share your findings with others
- Ask staff what they make of the results
- Consider what else you may need to know to make sense of the data
- Provide time for reflection with others
- Transparency is important AND remembering this is to help you improve
- Document the sharing and the actions you will take
Action and Follow-up

- Take action to make improvements
- Document the action
- Decide when you will follow-up to see if actions worked
- Follow-up
  - Could be a year or two years depending on changes made
- Let students know what you are doing to improve
Questions and Discussion
Your Feedback

- Three Question Assessment?
  - What is the most important thing you learned?
  - What are you still unclear about?
  - What would make this presentation better?