

Assessing Student Learning and Development

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Presentation Overview

- Reminders for Writing Outcomes
- Identifying how Outcomes are Delivered
- Identifying Evaluation Methods and Criteria
- Questions



Given what we have already discussed, which steps do you already have in place?

Which portions of the template do you already have completed?





Mission Statement

- “In just a few sentences, a mission statement needs to communicate the essence of your organization to your stakeholders and to the general public.” - Fund Raising Made Simple
- It can come from your strategic planning initiatives or from your Division, institution, or unit plan
- It can also come from your professional organization (e.g., ACUHO-I, ACU-I, CAS)



Goals



- They are broad, general statements of [1] what the program wants students to be able to do and to know or [2] what the program will do to ensure what students will be able to do and to know.
- They are not directly measurable. Rather,
- They are evaluated directly or indirectly by measuring specific outcomes related to the goal.
- They are related to the mission and goals of the department and college in which the program resides, and to the mission and goals of the College, District, and/or System.



Example Program Goals

- To provide students with opportunities to develop their communication skills



Other Examples

- To become critical thinkers
- To encourage life long learning
- Students will appreciate their diverse environment
- Students will learn to be global citizens



Ask these Questions about your Goals

- Is it meaningful?
- Is it important?
- Is it a broad, general statement of either what the program wants students to be able to do and to know or what the program will do to ensure what students will be able to do and to know?
- Is it related to my department or program mission and objectives?
- Is there an accompanying outcome to measure this objective?



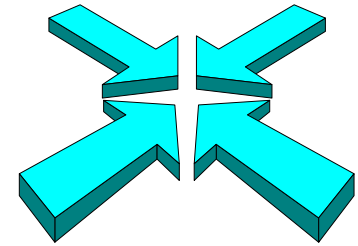


With which goal (s)

Do your outcomes align?



Outcomes



- Outcomes are more detailed and specific statements derived from the goals.
- These are specifically about what you want the **end result** of your efforts to be. In other words, what do you expect the student to know and do as a result of your one hour workshop; 1 hour individual meeting; website instructions; etc.
- **It is not what you are going to do to the student**, but rather it describes how you want the student to demonstrate what he or she knows or can do.

Additional Assistance

Constructing Learning Outcomes: Bloom's Taxonomy

- Outcomes use active verbs such as articulate, illustrate, conduct, synthesize, analyze, construct, etc.
- Depending on what level of learning you expect from your learning delivery method.
- <http://www.teachers.ash.org.au/researchskills/dalton.htm>
- http://www.kent.wednet.edu/KSD/MA/resources/blooms/teachers_blooms.html
- <http://www.coun.uvic.ca/learn/program/hndouts/bloom.html>





Outcomes, Cont.

- Make a conscious decision to articulate outcomes that infer pre- and post-tests
- Make a conscious decision to be held responsible for behavior
- Remember that your outcomes may look different for your various constituents - - you may want to start with your more manageable population first, such as your Para-professionals





Outcomes, Cont.

- You may also want to start with outcomes that are more manageable. For instance, articulate outcomes for your outreach programs first; then later, move to your individual consultations; than your information pieces, if at all.



Outcomes, Cont.

- Regardless of whether your goals are top down – the outcome is where you operationalize the goal. Therefore, the outcome or end result of the doing allows you to “personalize” the goal to your own program.



Example Outcomes

- Students will be able to effectively write mathematical proofs.
- Students will be able to accurately apply ANOVA and accurately interpret the results.
- Students will debate whether macro or micro economic principals are present in each business case study.





Examples of Outcomes

1. Students will be able to compare and contrast various aspects of 14th century Italian art with Post-Renaissance Art.
2. Students will critique what is not working in an assigned chemical interaction experiment in the lab.
3. Students will apply statistical calculations in SAS to the problems identified in their senior capstone projects.





Refining Outcomes

Students will learn chemical equations.



Refining Outcomes, Cont.

Students will be able to identify components of chemical equations in their laboratory experiments.





Refining Outcomes

Students will understand the theories behind fundamental psycho-analysis.



Refining Outcomes, Cont.

Students will list three theories of psycho analysis and will be able to articulate the steps for psycho analysis that apply to all three theories.



Questions to Ask Yourself About Outcomes

- Is it measurable/identifiable?
- Is it meaningful?
- Is it manageable?
- Who is the target audience of my outcome?
- Who would know if my outcome has been met?
- How will I know if it has been met?
- Will it provide me with evidence that will lead me to make a decision for continuous improvement?



Articulate your Outcomes:

Refine At Least
One of Your
Outcomes



After you have articulated
your outcomes...

Make sure You have a program
that can actually deliver the
outcome

e.g., planning



An Example of an Outcome Delivery Map

	Activity/Project/Workshop 1	Activity/Project/Workshop 2	Etc.	Etc.
Outcome 1				
Outcome 2				
Outcome 3				
Etc.				



Work on Outcome Delivery Map



Before Choosing an Assessment Method...

- Think about what meeting the outcome looks like
 - Be sure to describe the end result of the outcome by using active verbs
 - This helps articulate the criteria for identifying when the outcome has been met
- Describe how your program is delivering the outcome
 - There may be clues in the delivery of the outcome that help you determine how to evaluate it



Determine how you are delivering your outcome

- Is the expected end result (e.g., outcome) realistic with how you are delivering the outcome?
- Are you expecting too much or too little from the student?
- What method of delivering the outcome could also be used as a method for evaluating the outcome?



Before Choosing an Assessment Method, Cont.

- Think about collecting data
 - from different sources to make more meaningful and informed decisions for continuous improvement (*e.g., surveys, observations, self-assessment*) and for triangulation of data
 - that you believe will be useful in answering the important questions you have raised
 - that will appeal to your primary constituents or to those with whom you are trying to influence



Measurement Methods

(Palomba and Banta, 1999)

- Evidence of learning- basically two types
 - Direct-methods of collecting information that require the students to display their knowledge and skills
 - Indirect- methods that ask students or some one else to reflect on the student learning rather than to demonstrate it



Another Way to Look at It (Ewell, 2003)

- There are **naturally occurring assessment techniques** (e.g. project-embedded assessment methods such as essays, observed behavior, student interactions, student debates)
- There are those **designed** as a means to evaluate (e.g., surveys)



Some Methods That Provide Direct Evidence



- Student work samples
- Collections of student work (e.g. Portfolios)
- Capstone projects
- Project-embedded assessment
- Course-embedded assessment
- Observations of student behavior
- Internal juried review of student projects
- External evaluations of student performance
- Document analysis (e.g., meeting minutes, policies, handbooks)

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Direct Evidence Cont.

from Peggy Maki, Ph.D.

- External juried review of student projects
- Externally reviewed internship
- Performance on a case study/problem
- Performance on problem and analysis (Student explains how he or she solved a problem)
- Performance on national licensure examinations
- Locally developed tests
- Standardized tests
- Pre-and post-tests
- Essay tests blind scored across units





Some Methods That Provide Indirect Evidence

adapted from Peggy Maki, Ph.D.

- Alumni, Employer, Student Surveys
- Focus groups (depending on the interview protocol, this could be used as direct evidence)
- Exit Interviews with Graduates
- Graduate Follow-up Studies
- Percentage of students who go on to graduate school
- Retention and Transfer Studies
- Job Placement Statistics



Indirect Evidence Cont.

- Faculty/Student ratios
- Percentage of students who study abroad
- Enrollment trends
- Percentage of students who graduate within five-six years
- Diversity of student body
- CAS Standards





Choosing A Tool

- It is important to choose tools based on what you are trying to assess, not on what tool is most appealing to you
- Consider what will influence your constituents
- Consider what will provide you with information to make decisions
- Be able to justify your choice of tool and method





Things to Consider When Choosing an Instrument

- What outcome(s) are you measuring?
- What criteria will determine if the outcome is met?
- Who is being assessed? How often do I have access to them? Do I know who they are?
- What is my budget?
- What is my timeline?
- What type of data is most meaningful to me: direct/indirect and qualitative/quantitative



Things to Consider, Cont.

- Who will analyze the data and how?
- Who needs to see this data?
- How easily can I fit this method into my regular responsibilities? (every day, week, semester, year)
- Who needs to make decisions with this data?
- How will I document the evidence and the decisions made from that evidence?





Example Outcomes

- Students will be able to articulate the steps of ethical decision making
- Students will be able to identify the challenges to making ethical choices (via case studies)
- Students will be able to evaluate their own choices and identify where they excelled in their own ethical decision making (via journals)





Possible Assessment Tools

- Quiz
- Essay
- Journal
- Case Study
- Observation
- Peer Evaluation with criteria or rubric
- Professional Evaluation with criteria or rubric



Choose an Outcome and

Work through this Process



Questions to Ask About Choosing a Measurement Tool

- How is this outcome delivered/implemented?
- What is my budget?
- What is my timeline?
- What are my analysis capabilities?
- Who needs to see this data?
- How easily can I fit this method into my annual responsibilities?
- Who needs to make decisions with this data?
- Will this kind of evidence help me make the decisions I need to make?
- How will I document the evidence and the decisions made from that evidence?



Refining the Opportunities you Provide Students to Learn

- In some cases, you may need to refine the way in which you provide students the opportunity to learn or the way in which you evaluate the student learning
- Or you may just need to better articulate the criteria that describes that which you want the student to demonstrate (i.e. What does problem solving look like? How do you identify when it is taking place?)





Closing the Assessment Loop

- Briefly report methodology for each outcome
- Document where the students are meeting the intended outcome
- Document where they are not meeting the outcome
- Document decisions made to improve the program and assessment plan
- Refine assessment method and repeat process after proper time for implementation





Reporting Strategies

from Gary Hanson, Ph.D.

- Know your data
- Know your audience
- Tell the story
 - Identify meaningful indicators to shape the story
 - Examine indicators for patterns
- Begin with the end in mind
- Involve the end users in the process



Take-Home Messages

- You do not have to assess everything you do every year.
- You don't have to do everything at once-start with 2 or 3 learning outcomes
- Think baby steps
- Be flexible
- Acknowledge and use what you have already done.
- Assessment expertise is available to help - -not to evaluate your program
- Borrow examples from other institutions to modify as appropriate
- Time for this must be re-allocated
- We allocate time according to our priorities

Resources

- Each Other
- University Planning and Analysis (UPA) Assessment website
 - <http://www2.acs.ncsu.edu/UPA/assmt/>
- Higher Learning Commission Website
<http://www.ncahigherlearningcommission.org/>





Questions?



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One Minute Evaluation

- What is the most valuable lesson that you learned from this workshop?
- What is one question that you still have?
- What do you think is the next step that your division/program needs to take in order to implement systematic program assessment?



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