

## Evaluating Student Learning and Development

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## Intended "Take-Aways"

- An ability to a) articulate what outcomes-based assessment is, b) why it is important, and c) how it differs from research
- An ability to identify where you deliver your services and how they may be best evaluated as a result
- An ability to develop criteria for your evaluation methods/tools

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## Turn to each other in groups of two and answer these questions

- In two sentences or less,
  - How would you describe what outcomes-based assessment is?
  - How would you explain its importance?

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## The Assessment Cycle (Bresciani, 2006)

- The key questions...
  - What are we trying to do and why? *or*
  - What is my program supposed to accomplish? *or*
  - What do I want students to be able to do and/or know as a result of my course/workshop/orientation/program?
  - How well are we doing it?
  - How do we know?
  - How do we use the information to improve or celebrate successes?
  - Do the improvements we make contribute to our intended end results?

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## The Iterative Systematic Assessment Cycle

Bresciani, 2006



## The Purpose (Bresciani, 2006)

- Outcomes-Based assessment does not exist for assessment's sake
- It is taking what most of us already do, and making it systematic
- Its purpose is to reflect on the end result of doing - - are we accomplishing that which we say we are?


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## The Purpose, Cont. (Bresciani, 2006)

- It is NOT personnel evaluation
- It can be both formative and summative
- Planning is incorporated into it
- All types of assessment have value (e.g., needs, utilization, satisfaction, learning and development) but we have to pay attention to evaluating student learning


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## Drivers, Cont.

- National Commission on the Future of Higher Education (2006)
  - Demand for Public Information about Performance
    - Transparency of outcomes and results
    - Comparable measures of quality
    - Demonstration of value-added of the entire educational experience


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## Drivers, Cont.

- Accountability requirements handed back to states
  - Performance indicators
  - Standardized tests
- Discipline Standards could be designed by disciplines
- Increased focus on private education
- Still no focus on evaluating transferability of learning


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## Now turn to each other

- Would you change any of your responses to the aforementioned questions?
  - How would you describe what outcomes-based assessment is?
  - How would you explain its importance?

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## Report Out

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## How does OBA differ from Research?

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Papert's (1991) Situational Constructionist Learning

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## Typical Components of An Outcomes-Based Assessment Plan (Bresciani, 2006)

- Program or Course Name *versus* Title of the Study
- Program Mission or Course Purpose *versus* Purpose of the Study
- Goals
  - Align with your strategic plan, college goals, division goals, or department goals
- Outcomes *versus* research questions or hypothesis
  - Student Learning and program
- Planning for Delivery of Outcomes
  - Concept Mapping
  - Syllabus Design
- Evaluation Methods *versus* Methodology
  - With criteria for each outcomes
  - Add Limitations, if necessary
  - Link to Division Indicators

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## Typical Components of An Outcomes-Based Assessment Plan, Cont.

- Implementation of Assessment Process *versus* methodology
  - Identify who is responsible for doing each step in the evaluation process (list all of the people involved in the assessment process at each step of the process)
  - Outline the timeline for implementation
  - Identify who will be evaluated
  - Identify other programs who are assisting with the evaluation
  - Identify who will be participating in interpreting the data and making recommendations and decisions

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## Typical Components of An Outcomes-Based Assessment Report

- Program Name
- Outcomes
- Results *versus* Findings
  - Summarize the results for each outcome
  - Summarize the process to verify/validate the results
- Decisions and Recommendations *versus* Discussion and Recommendations
  - Summarize the decisions/recommendations made for each outcome

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## Typical Components of An Outcomes-Based Assessment Report, Cont.

- Decisions and Recommendations, Cont.
  - Identify the groups who participated in the discussion of the evidence that led to the recommendations and decisions
  - Summarize the suggestions for improving the assessment process
  - Identify when each outcome will be evaluated again (if the outcome is to be retained)
  - Identify those responsible for implementing the recommended changes

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## Things to Consider

- How detailed do you want your internal and external reports to be?
- How much do you want to describe the criteria you used for evaluation, the details of the findings, and the details of the decisions you made?

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## Reminders about Outcomes



## 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.

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## 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.kent.wednet.edu/KSD/MA/resources/blooms/teachers_blooms.html)
  - <http://www.coun.uvic.ca/learn/program/hndouts/bloom.html>



## 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.

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## 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

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## 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.

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## 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.				


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## Refine one or more of your outcomes as well as your plan to deliver those outcomes

Mapping helps you identify evaluation methods and criteria


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## 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


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## 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/verification 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


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## 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


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## 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)

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## Your Choices are

- Which method(s) - optional to skip and focus on tools
- Which tool(s) - by what means will you gather the data?
- Which criteria?

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## 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

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## 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 words/numbers

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## 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?

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## Common Tools for Identifying Learning and Development

- Interviews
- Focus Groups
- Observations
- Surveys
- Criteria and Rubrics
- Case Studies
- Portfolios

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## Why Use Interviews and Focus Groups?

- Gather rich data in more detail
- Allows you to follow up on comments
- Gather data on subjects that you know very little about so you can better design surveys
- Supplemental information for other methods/tools
- To explain survey results - follow-up on more general survey questions to get at what the students were really trying to say

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## Interviews/Focus Groups, Cont.

- Use interviews or focus groups to ask questions that allow students to demonstrate these outcomes. You can also ask questions about how they learned the information and how to improve the interpretation and dissemination of the information.
- Use interviews if you think “group think” will occur in focus groups or if you are concerned that students won’t share in a group setting

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## Data Analysis

- Transcribe audio-tapes
- Constant –comparison coding
- Open, axial, and selective coding
  
- Criteria often emerges

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## Observations

- Observing people as they engage in an activity.
- Continuum: participant-observer

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## Observations

- Observations of actual student work can be used (with identified criteria) to determine if student are meeting outcomes. The observer may have a check list that is used at the time of the observation or take notes and review the notes for the criteria at a later time.

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## Data Analysis

1. Code observation notes
  - Constant –comparison coding
  - Open, axial, and selective coding
2. Use criteria as a “checklist” during observation

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## Surveys-

- Create your own, which will most likely be self-report.
  
- Use a standardized inventory to evaluate critical thinking or moral development

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## Data Analysis

- Quantitative – typically descriptive, but often depends on what you were trying to discover from the survey
- Criteria are the questions themselves

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## Case Studies

- Scenarios designed to encourage critical thinking and discussion about a topic.
- Case studies allow the students to teach each other as well as gather evidence of student learning and development which can be used for program improvement.

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## What is a Portfolio in the Context of this Workshop?

- Portfolios are a collection of artifacts to demonstrate that one has accomplished that which he/she said he/she would accomplish
- Portfolios can be used to assess a
  - student's learning and development,
  - a program's accomplishments,
  - an institution's accomplishments,
  - or a professional's achievements
- Portfolios can come in a variety of forms

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## Electronic Portfolios as Knowledge Builders

by Barbara Cambridge

- Portfolios can feature multiple examples of work
- Portfolios can be context rich
- Portfolios can offer opportunities for selection and self-assessment
- Portfolios can offer a look at development over time

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## Electronic Portfolios

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- Students can store artifacts of learning across the course of their entire academic career
- Students can store evidence of learning from the curricular and co-curricular, from internships and service
- Can allow for sharing of artifacts across departmental lines and across College lines
- Can provide evidence of shared institutional learning principles or competencies (e.g., general education)

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## Data Analysis


Depends on the artifacts contained in the portfolio

Often, criteria checklists or rubrics are applied to the individual artifacts and to the portfolio overall

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## Which method(s) or tool(s) will best evaluate your outcome(s)?



## Developing Criteria


Criteria checklists or rubrics



## Uses of Rubrics

- Provide evaluators and those whose work is being evaluated with rich and detailed descriptions of what is being learned and what is not
- Combats accusations that evaluator does not know what he/she is looking for in learning and development
- Can be used as a teaching tool – students and staff begin to understand what it is they are or are not learning or are or are not able to demonstrate what they know


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## For example - Use of Journal Rubric

- You can use a rubric to
  - Norm staff's expectations
  - Inform students of what you are looking for
  - Give students an opportunity to see how they have improved
  - Make grades more meaningful
  - Help students identify their own learning or absence thereof
  - Assess a student, course, workshop, or a program


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## Some Types of Rubrics

- Checklist - A simple list of criteria and possibly a rating scale
- Advanced Checklist - Full descriptions of the list of criteria and a rating scale
- Simple Model - Full descriptions of the list of criteria and simple descriptions of levels
- Full Model - Full descriptions of the list of criteria and full descriptions of levels


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## Some Types of Rubrics

- Checklist - A simple list of criteria and possibly a rating scale
  1. 2-minute description of ethical dilemma \_\_\_\_\_
  2. Explanation of reason for ethical dilemma \_\_\_\_\_
  3. Explanation of ethical dilemma \_\_\_\_\_
  4. Depth of awareness of potential barriers to resolving ethical dilemma \_\_\_\_\_
  5. Illustration of expected results in resolving dilemma \_\_\_\_\_

Y = Yes      N = No    or  
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## Excerpt for Oral Presentation Outcome

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Oral Presentation Rubric			
Presenter's Name: _____			
	Distinguished	Intermediate	Novice
<b>Volume</b>	Presenter is easy to hear.	Audience is able to hear as a whole but there are times when volume is not quite adequate.	Presenter is difficult to hear.
10	10	5	0
<b>Rates</b>	Rates of speech are appropriate.	Speaker may at times seem like s/he is rushing or exaggerating pauses.	The rates of speaking are too slow or too fast.
10	10	5	0
<b>Mannerisms</b>	Speaker makes eye contact with everyone and has no nervous habits. Speaker has excellent posture.	Eye contact may focus on only one member of the audience or a select few members. Mildly distracting nervous habits are present but do not override the content.	Very little eye contact is made with the audience. It may sound like the speaker is reading the presentation. Nervous habits that distract the audience are present.
10	10	5	0
<b>Engagement</b>	Presentation involves audience, allowing time for audience to think and respond.	Audience is involved but inadequate processing or response time is provided.	Speaker does not involve audience.
10	10	5	0

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## Steps to Creating a Rubric

- Articulate the outcome
- Decide what meeting the outcome looks like – “How do you know the outcome has been met? What does it look like?”
  - Articulate exactly what you are looking for and how you will know it has been met
- List the aforementioned as criteria or a detailed description
- Choose a model for a rubric that best fits your project

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## Steps to Create a Rubric, Cont.

- Articulate the levels you would expect that criteria to be demonstrated
- If you choose, define those levels in great detail
- Norm the group using the rubric
- Pilot the rubric
- Revise the rubric

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## Basic Agreements

- Agree on an outcome
- Agree on method/tool of data collection
- Agree on the meaning for the outcome and definition – in other words agree on how you know the outcome is met and what it will look like when you see it met
- Agree on the systematic implementation of the assignments and the rubric

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Select one of your outcomes and draft a criteria checklist or a rubric

## On-Line Rubric Resources

- <http://school.discovery.com/schrockguide/asses.html>
- <http://www.odyssey.on.ca/~elaine.coxon/rubrics.htm>
- <http://rubistar.4teachers.org/>
- [http://intranet.cps.k12.il.us/Assessments/Ideas and Rubrics/ideas and rubrics.html](http://intranet.cps.k12.il.us/Assessments/Ideas%20and%20Rubrics/ideas%20and%20rubrics.html)
- [http://teachers.teach-nology.com/web\\_tools/rubrics/](http://teachers.teach-nology.com/web_tools/rubrics/)

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## Reporting Results and Making Decisions

- Consider combining the results and decisions section on your report if you are concerned about requesting too much detail
- More detail helps the division to plan and re-allocate resources according to division priorities
- Relate findings and decisions back to the outcome

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## 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

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## What keeps you from engaging systematically in outcomes-based assessment?

What do you need to do about that?



## Reference Table 1, if Helpful

Barriers to Engaging in Outcomes-Based Assessment for Student Affairs/Services Professionals  
(Bresciani, Under Review)



## 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/>

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## Questions?



## Evaluation

- Please complete the evaluation in your packet. Thank you!

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## References

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