

How Do You Know What Students Can Do? Assessing Student Learning

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#assessmentisfun

Today's Intended Outcomes

- As a result of attending today's session, participants will be able to:
 - Define student learning outcomes
 - Distinguish between program outcomes and student learning outcomes
 - Write student learning outcomes
 - Distinguish between direct and indirect assessment methods



Teach, Learn, and Assess



Basics for Outcomes

- What are we trying to do?
- How well do we do it?
- How do we know that?
- How can we improve what we are doing?

"Without data, you're just another person with an opinion."

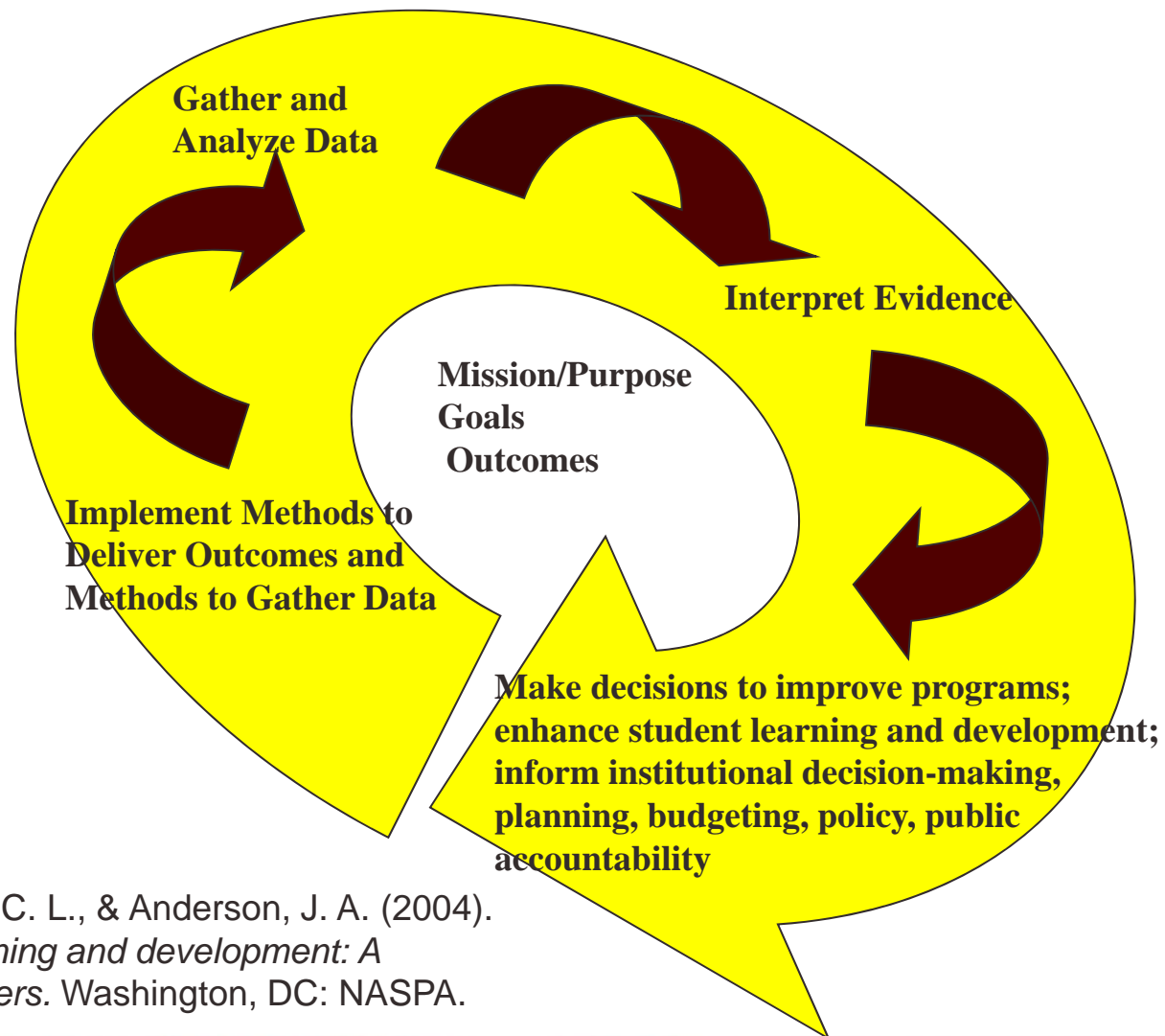


Advantages of Using Outcomes

- Make it clear what students can expect to gain
- Make it clear what the program will accomplish
- Help staff select appropriate strategies to reach the outcomes



Assessment Process/Cycle



Bresciani, M. J., Zelna, C. L., & Anderson, J. A. (2004). *Assessing student learning and development: A handbook for practitioners*. Washington, DC: NASPA.



Heart of the Cycle: Outcomes

- What do you expect students to know and/or be able to do by the end of their experience in your program?
- How do your programs promote the learning that Texas A&M seeks for its students? That the Department articulates for students?
- How do you know that?



What are Learning Outcomes?

Learning outcomes are what *students* are expected to *demonstrate* in terms of **knowledge**, **skills**, and **attitudes** upon *completion* of a program, course, or activity.

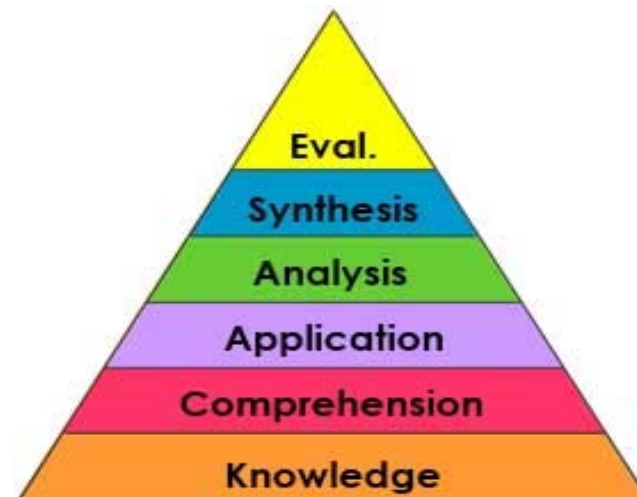


Bloom's Taxonomy (1956)

New Version



Old Version



Remembering: can the student recall or remember the information?

Understanding: can the student explain ideas or concepts?

Applying: can the student use the information in a new way?

Analyzing: can the student distinguish between the different parts?

Evaluating: can the student justify a stand or decision?

Creating: can the student create new product or point of view?

Verb List

KNOWLEDGE	COMPREHENSION	APPLICATION	ANALYSIS	SYNTHESIS	EVALUATION
Cite	Arrange	Adapt	Analyze	Arrange	Appraise
Choose	Associate	Apply	Appraise	Build	Approve
Count	Clarify	Catalogue	Break down	Combine	Assess
Define	Classify	Chart	Categorize	Compile	Choose
Label	Convert	Compute	Compare	Compose	Conclude
List	Describe	Demonstrate	Contrast	Conceive	Confirm
Locate	Diagram	Develop	Correlate	Construct	Criticize
Match	Discuss	Employ	Criticize	Create	Critique
Name	Estimate	Extend	Deduce	Design	Diagnose
Recall	Explain	Generalize	Defend	Devise	Evaluate
Recognize	Express	Illustrate	Detect	Formulate	Judge
Record	Identify	Interpret	Diagram	Generate	Justify
Repeat	Paraphrase	Manipulate	Differentiate	Integrate	Prioritize
Select	Report	Modify	Discriminate	Organize	Rate
State	Restate	Order	Distinguish	Plan	Recommend
Write	Review	Predict	Examine	Prepare	Research
	Sort	Prepare		Structure	Resolve
	Summarize	Produce		Synthesize	Revise
	Transfer	Use			
		Utilize			



Developing Learning Outcomes

- **A**udience
- **B**ehavior
- **C**ondition
- **D**egree of Achievement (may be omitted)



Heinich, R., Molenda, M., Russell, J., & Smaldino, S. (2002). *Instructional Media and Technologies for Learning* (7th ed.). Englewood Cliffs, NJ: Prentice Hall, Inc.



Developing Learning Outcomes

To write a learning outcome, follow the formula:

Condition

Audience

Behavior

Degree

Quadratic Formula

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$



Developing Learning Outcomes

Condition: By participating in the leadership workshop,

Audience: students

Behavior: will explain

Degree: three of the five leadership criteria as stated in Kouzes and Posner's *The Leadership Challenge*.



Are they Learning Outcomes?

- 75% of students will be satisfied.
- Students will rate the speaker positively.
- Students will create a personal leadership philosophy based on three models taught in Lead 101 in the fall semester.
- After the service project, students will be able to explain two root causes of homelessness in Bryan/College Station.



Learning Outcomes (cont.)

- The workshop will increase students' appreciation of diversity.
 - Better: As a result of attending the workshop, students will be able to identify three similarities and three differences they have with someone of a different background.



Learning Outcomes (cont.)

- Students will be able to be better leaders because they were RAs.
 - Better: As a result of being employed as an RA, these students will demonstrate servant leadership behaviors.



What are Program or Process Outcomes?

Program or process outcomes are what a program or process is **to do, achieve, or accomplish.**



Practice Activity

Practice developing learning outcomes

- Pick a program or activity
- Identify the mission/purpose of the program or activity
- Develop learning outcomes
 - Action verbs focusing on behavior
 - Meaningful
 - Measurable
 - Manageable



Direct vs. Indirect Measures

- Direct: students demonstrate their skills or knowledge. Tangible, visible, self-explanatory.
- Indirect: students reflect on their own learning. Implied, subjective.



Assessing Outcomes

Indirect: I developed a personal leadership philosophy

(Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree)

Direct: Have students turn in their philosophy statement and assess it using a previously developed rubric based on a leadership model(s)



Assessing Outcomes (cont.)

Indirect: As a result of today's service project, I can explain the root causes of homelessness in Bryan/College Station

(Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree)

Direct: Describe the root causes of homelessness



Assessment Methods Examples

- Work Sample
- Observation with Rubric
- Test (pre/post, post/then)
- Case Study
- Reflection/Journals
- Surveys
- Focus Group/Interview
- Learning Contracts



Questions?





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