Practical Strategies for Assessing Student Learning Outcomes

UWB Teaching in Progress Seminar (TIPS)
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Outline

• Introduction/defining student learning assessment
• Student learning outcomes
• Pedagogy and student learning
• Student learning assessment tools
• Evidence and criteria for evaluation
• Closing the loop
• Applications
Outcome for today’s session

By the end of the session you will be able to discuss the key stages and questions in the assessment cycle in order to apply them to your own instructional scenarios.
Defining student learning assessment

Assessment is:

• Knowing **what** you are doing
• Knowing **why** you are doing it
• Knowing what students are **learning** as a result
• **Changing** because of the information

- Debra Gilchrist
Strategies for Building Assessment into Instructional Design

Backward Design
(Wiggins & McTighe, 2005)

Three stages:
1. Deciding on desired results.
2. Developing accepted evidence of learning.
3. Planning instruction and learning experiences that help students represent their understanding at a satisfactory level.
Strategies for Building Assessment into Instructional Design

Integrated Course Design

(Fink, 2003)
Integrated Course Design

Step 1: Identify important situational factors
Integrated Course Design

Step 2: Make three key decisions

1. What do you want students to learn? *(Learning Goals)*

2. What will you and the students need to do in order for students to achieve the learning goals? *(Teaching and Learning Activities)*

3. How will students (and you) know if these outcomes are being met? *(Feedback and Assessment)*
Student Learning Outcomes

Key question: What do you want the student to be able to do or learn?

(Learning Goals/Outcomes)
The student learning outcome “formula”

Observable behavior / verb phrase +

*Apply critical reading strategies*

In order to +

*in order to*

Reason why

*identify key arguments and conclusions in a scholarly journal article*

- ACRL Immersion Assessment program
The student learning outcome “formula”

Observable behavior / verb phrase +
  • Select verbs that reflect desired skill or cognitive level
  • Select verbs that are measurable or “judge-able”

In order to +
  • Serves as a bridge between the ability and the application

Reason why
  • Answering the WHY question describes the way the student will apply the ability; creates relevance for the student
Characteristics of “robust” learning outcomes

• Measurable/ “Judge-able”
• Clear to student, faculty, librarian
• Developmental, transferable
  • Use a variety of levels of \textit{Bloom’s taxonomy}
• “Balanced” – matching verb statement and “why” statement
Characteristics of “robust” learning outcomes

• 2-3 learning outcomes for a 50 minute session are appropriate:

“It is not about what we can teach in a 50 minute session, it is about what students can learn in a 50 minute session” (Gilchrist, 2010).
Activity: Creating Robust Learning Outcomes

--Think about one 2 hour class session you have taught this quarter (or will be teaching next quarter).

--Identify 2-3 learning outcomes for this session and record these on your planning worksheet.
Pedagogy and Student Learning

**Key question:** What will you and the students need to do in order for students to achieve the learning outcomes?

*(Teaching/Learning Activities)*
Activity: Aligning Pedagogy with Outcomes

From the list of “teaching strategies” on your handout, brainstorm a list of pedagogical approaches you could use to help students achieve your desired outcomes.
Assessing Student Learning Outcomes

Key question: How will you and the students know if the outcomes are being met? (Feedback and Assessment)
Assessment Tools

There are numerous assessment tools available to assess student learning outcomes:

- Classroom Assessment Techniques (CATs)
- Performance assessment
- Student self-report
- Fixed choice tests
Classroom Assessment Techniques

These are good for providing small-scale, in-the-moment snapshots of how students feel about learning, what they learned, and what they still need to learn.

• “Muddiest point” questions
• Minute paper
• Clicker/audience response questions
Performance assessments

- Bibliography Analysis / Annotated bibliography
- Observation
- Research Journals/Portfolios
- Worksheets
- Portfolios
- Concept maps
- Student presentations
- Final research papers (or drafts)
- Lab reports
- Posters
- Speeches
Student self-report

These approaches are useful for understanding student perceptions about their own learning.

• Self-assessment surveys
• Interviews
• Focus groups
• National Survey of Student Engagement (NSSE)
Activity: Assessment Tools Brainstorming

Look at the outcomes you drafted and your list of teaching strategies.

• Brainstorm a list of some of the assessment tools you could use to assess student learning on this outcome.

Consider:
• How will the tools you have selected enable students to demonstrate their learning?
• What assessments have you used in the past? What has worked for you, and why?
Evidence & Criteria for Evaluation

Key question: How will I know the student has done this well?
How do I know the student has done well?

- What components (criteria) are you looking for in the student performance or product?
- How well has the student performed each component?
- What does good performance of each component look like? Poor performance? Mediocre?
How can you evaluate skills?

• What indicators of (or criteria for) the skill exist?

• What components (criteria) are you looking for in the student performance or product?
  • **Checklist** (observed; not observed)

• How well has the student performed each component?
  • **Likert Scale** (0, 1, 2, 3)

• What does good performance of each component look like? Poor performance? Mediocre?
  • **Rubric**
**B, M, E**
- has beginning
- has middle
- has end

**Details**
- has lots of details

**Punctuation**
- all sentences have punctuation
- have capitals:
  - beg. of sentence
  - I-names
- all the words on the word wall are spelled right
- goes with the story

**Spelling**
- some spelling is right
- has a title that doesn't go with story

**Title**
- no beginning
- no middle
- no end

**Capitals**
- no beginning
- no middle
- no end

**M, E**
- has 1 or 2 parts but is missing B, M, E
- some details
- some punctuation marks
- some capitals
- nothing is spelled right

**Title**
- no title
Setting Your Evaluation Criteria

• Try to be as **specific as possible** when developing criteria for assessment
  • What does “good,” “poor,” “mediocre” look like?

• **Match the assessment/criteria to each other and to the outcome**
  • Are you assessing for a skill that has not been clearly stated as a learning outcome?
Activity: Developing Evaluation Criteria

Based on the outcomes, teaching strategies, and assessments identified in previous activities, develop a list of evaluation criteria for assessing your outcomes in student work.
Student learning assessment: Closing the loop

You’ve used your checklist/rubric, you’ve rated the students’ work. So...

• How do you feed this back into your teaching?
• Into your communication with your students?
• Into your work within your school or program?
Applications

Start small: try out a low-stakes in-class assessment activity.

Build up to designing more integrated assessments.
References


