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Why Assessment Works: Evidence-based Examples

Office of Educational Effectiveness
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Workshop Facilitators

Krista Emma
Educational Effectiveness Specialist

Diana Jernigan-Breedy
Educational Effectiveness Specialist

Workshop Objectives

- Discuss the different ways institutions of higher education can approach assessment.

- Explain the role that the assessment process plays on improving student's ability to achieve stated learning objectives.

- Evaluate select examples from the literature on the benefits of the assessment practices.

Pulse Check: How do you feel about assessment?

(Be honest. No judgment. Anonymous Poll.)

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Why do we do assessment?

Background

- Emerged in the late '70s and '80s during a period of closer examination of education.

- President's Commission on Excellence in Education 1983 report *A Nation at Risk* addressed shortcomings of U.S. educational systems.

- Ushered in a new age of public/political interest in accountability and excellence in education to close achievement gaps.

- Resulted in an increased emphasis on high-quality teaching, learning and a 'culture of evidence'.

- Educational researcher, K. Patricia Cross, viewed it as an opportunity to foster internal feedback loops for improvement.

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How does institutional approach impact the way IHEs view assessment?

Assessment: It's all in the approach!

❌	**⭐**
• Overly prescriptive	• Flexible framework
• Administration-owned	• Faculty-owned
• Created in a top-down manner	• Created through shared governance
• Compliance-centered	• Student-centered
• Driven heavily by accreditation requirements ('box-checking', 'bureaucratic')	• Driven by an interest in reflection, data-driven decision-making, & continuous improvement
• Labor-intensive afterthought	• Embedded, aligned, and intuitive
• Does not provide valuable, actionable data	• Uses results to 'close the loop'
• Does not evolve with sector/IHE changes	• Receptive to feedback (assess the assessment)

Developing A Culture of Assessment

"Assessment is a chance for teachers to **focus even more deeply** on the discipline that they love" (Hutchings, 2010).

"Demonstrating student learning seems to be the academy's best strategy for **confronting criticisms and adapting constructively** to change" (Barkley & Major, 2022, 78).

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Where does the evidence that assessment works come from?

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Scholarship of Teaching & Learning (SoTL)

Assessment	SoTL
● Systematically investigating student learning outcomes achievement ● Using that information to improve learning experiences	● Making the results of assessment public ● Inviting opportunities for peer review though publishing ● Advances our collective understanding of effective pedagogy

"When we have better evidence, we can make better teaching decisions"
Barkley & Major, 2022, 257

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(Adapted from Richmond et al, 2022, 111)

Assessment as a form of Evidence-Based Practice

Think of your assessment plan like research on your own pedagogy:

Research Question	How well are students learning X?
Hypothesis	Students will be able to… (PLO statement)
Independent Variables	Teaching methods, instructional activities, assignments
Dependent Variables	Student achievement of PLO
Conduct Your Experiment	Teach your lesson/course/program and administer your assignment
Evaluate Your Data	Collect evidence (student artifacts) and analyze results. Use this empirical data to understand teaching effectiveness and inform future changes.

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(Adapted from Richmond et al, 2022, 82)

Select Examples: Benefits of Assessment

Assessment Foundations: PLOs

"Good scientists commit themselves to a hypothesis before conducting an experiment so that they can clearly determine their success, and good teachers set <u>learning objectives </u>to determine the success of their pedagogy"
(Richmond et al, 2022, 85).

Assessment Foundations: PLOs for Improved Performance

- Step 1 of the Assessment Process is to Articulate PLOs

- Founded on backward design principles - begin with the end in mind.

- Locke et al (1981): Study on Goal Setting and Task Performance published by the APA.

- In a review of lab and field studies, **90% that had clear, specific, and challenging goals had to higher performance results** than those with easy, amorphous, or no goals.

PLOs improve student achievement by:

- Directing Attention

- Increasing Persistence

- Increasing Motivation

- Supporting strategy development

- Improving metacognition

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Adapted from Locke et al, 1981 and Richmond et al, 2022

Assessment Foundations: PLOs for Equity

"Direct instruction on what to learn offers increased clarity for students with different background and levels of college preparation" (Richmond et al, 2022, 85).

- Aligns with principles of inclusive pedagogy

- Helps students of all backgrounds understand purpose of the course in their program/intended careers

- Makes implicit faculty expectations explicit to all learners, promotes learner agency

Assessment Foundations: Alignment

"Bad alignment renders information gained from embedded assessment meaningless." (Richmond et al, 2022, 97).

- Promotes alignment between lesson/course/program sequencing

- Promotes alignment between PLOs/CLOs and appropriate assessment methods

- Promotes alignment between assessment methods (test, papers, projects) and evaluation methods (rubrics, scores, qualitative feedback)

- Improves student satisfaction with a more cohesive, transparent educational experience
  - *When students sense a lack of alignment between LOs and assessment/evaluative methods, it can foster feelings of unfair treatment, reduce student motivation, and increase classroom dissent (Chory-Assad, 2002; Goodboy, 2011; Richmond, 2022).*

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Assessment Tools: Rubric Case Study

John Bean's (2011) *Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom* describes the following:

- 53 teachers from different fields graded all 300 essays
- Grades were assigned on a simple "9-point quality scale"
- 94% of graded essays received **SEVEN or more** different ratings
- ⅓ of the essays received **ALL NINE** scores

Adapted from Richmond et al, 2022, 99

Assessment Tools: Rubric Case Study

Why was there such a large discrepancy in the evaluation of this assessment?

Possible considerations:
- Differences in disciplinary emphasis
- No clear indication of the difference between score levels
- No agreed upon language or definition of rubric components/expectations
- No norming among teachers for inter-rater reliability

Potential Solution:
- Descriptive/analytical rubric - an assessment best practice!
- Provide clear descriptions for each level and/or assignment component
- Share with students in advance

Adapted from Richmond, 2022, 99

Assessment Tools: Rubrics

What does SOTL say about rubrics?

- Increase the **quality** of student work (Greenberg, 2015)

- **Reduces** grading burden (Suskie, 2018)

- Makes grading more **reliable** & **reduces disagreements** on grades between faculty & students (Jonsson & Svingby, 2007)

- **Clarifies** assignment/course/program expectations (Reddy & Andrade, 2010)

- Promotes **transparency, equity**, learner **agency,** & a **student-centered** approach

Wrap Up & Discussion

Takeaways

- Institutional approach to assessment matters.

- Should be faculty-owned & student-centered.

- Should leverage best practices like PLOS & rubrics to be most effective.

- Should be viewed as a cyclical process - not a one-off exercise.

- Communicating expectations to students explicitly (PLOs, alignment, rubrics) can enhance their motivation and performance.

- Contribute to SOTL: Study your pedagogy as rigorously as you research topics in your discipline!

Discussion

Have you had any assessment successes in your program?

What evidence did you collect that led to improvements? What was the impact on student learning achievement?

Discussion

Still skeptical about assessment?

What gives you pause? How could SBU adapt its approach or processes to make assessment more valuable to you?

Resources

References & Resources

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Thank you!
EducationalEffectiveness@stonybrook.edu