Learning Outcomes Assessment Newsletter

Office Of Quality Assurance Carleton University

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Welcome to the second edition of the Leaning Outcomes Assessment Newsletter. In this edition we present information on assessment strategies and techniques. We welcome you to share your thoughts and experiences in the comments section at the end.

Assessment Fundamentals

Assessments strategies are like snowflakes... each one different from the next. But there are a few basics that should be understood before building your own assessment plan. Below are definitions of some common assessment concepts.

<u>Curriculum-Embedded Assessment</u>: Assessments that take as evidence student work that is completed as part of the regular program curriculum. In other words, assessments based on course-assigned essays, presentations, projects, tests and exams. Typically students are more motivated to perform well on embedded assessments, leading to more accurate results.

Scoring Rubrics: An assessment tool that displays criteria for different levels of quality, against which student work can be evaluated. Rubric increase the reliability of assessments by making clear the criteria by which each artifact of student learning is judged.

<u>ePortfolio</u>: An online repository for student learning artifacts. They can also include student reflection on the learning process.

Direct Assessment: Assessments that make use of evidence that *demonstrates* desired knowledge or ability has been attained. E.g. Evaluating an essay as evidence of writing ability. Direct assessments can show what has been achieved, but not why or how this has occurred.

Indirect Assessment: Assessments that make use of evidence that suggests desired knowledge or ability has been attained. E.g. Evaluating a student survey about their confidence in their writing skills as evidence of writing ability. Indirect assessments are typically easier to administer and can provide useful data about beliefs.

Pre-Post Assessment Design: Assessments that compare student learning outcomes measures before and after opportunities for learning are received (i.e. upon entrance to the program, and again at graduation). These designs allow for the attribution of observed student gains to the program.

Why Course Grades Are Not Enough

Faculty often ask why grades cannot be used to assess learning outcome. The answer points to the fundamental different between **course-level** and **program-level learning outcomes**. While course-level learning outcomes tend to focus on the specific content areas and skill gained over relatively short time-period that the course takes place, program-level learning outcomes focus on the competencies students will gain throughout the duration of the program. Given this distinction, it's no wonder learning outcomes at the program level are intended to be much broader in scope. Rather than assessing discreet skills or specific facts, program-level learning outcomes assessment takes a more holistic approach to measurement that incorporates what students know and are able to do based on the culmination of all learning opportunities they have received.

Considering this distinction, course grades are generally considered to be inappropriate to assess program-level learning outcome. Course grades will often include more information than students' acquired skills or abilities. Attendance, participation, and adherence to guidelines may be factored into the course grade, but may be unrelated to the learning outcomes for the program.

Finally, course or assignment grades are often used as a global measure of students' performance in a number of areas. A-level students may perform well in all areas, but B or C students will probably have strengths in some areas and weaknesses in others. Often the only way to know where those strengths and weaknesses lie is to assess each learning outcome individually.

Selecting the Right Evidence for the Assessment

The type of evidence selected for evaluation is an integral part of the assessment process. With all that students produce in any given year, there are many types of evidence that may be used. Some evidence is better for answering certain types of assessment questions than others. To aid in the selection process Integral-Process-The University of Victoria in Melbourne, Australia has paired specific skills and abilities with different types of evidence that are appropriate for assessing them.

Thinking critically and making judgments	Solving problems and developing plans	Performing procedures and demonstrating technique	Communicating knowledge
EssayJournalCommittee briefing paperBook reviewNewspaper article	 Problem scenario Group work Research bid for a realistic brief Conference paper 	 Demonstration Role play Poster Lab report Illustrated manual on using equipment 	 Written presentation (essay, report, reflective paper etc.) Oral presentation Group work Discussion/debate/role play Presentation to camera

For the complete listing of skill areas and appropriate evidence click here.

Avoiding the "Teaching to the Test" Phenomenon

A common concern regarding learning outcomes assessment is that faculty will end up "teaching to the test;" that is, providing instruction that is directed to the assessment measures. There is nothing inherently wrong with this approach, provided your assessment captures everything you want students to be able to know, do, and value. However, it can be a dangerous approach when it denies the teaching of more complex concepts that are difficult to measure in an evidence-based way.

Below are some tips to help you avoid the pitfalls of teaching to the test...

1. Keep the stakes low

When big gains only come from big successes it may be tempting to create assessments that guarantee positive results. For accurate and useful assessments programs need the freedom to fail. A focus on program **improvement** instead of **accountability** can help keep the purpose of assessment in proper perspective.

2. Use measures that mirror the skills and abilities being assessed as closely as possible.

The obvious choice to assess oral presentation skills is an oral presentation. When the assessment measure is equivalent to the skill being assessed, "teaching to the test" equals teaching to the skill.

3. Do not rely on standardized tests alone

Standardized tests are relatively easy to administer and can provide useful information on how students are preforming relative to others. However, they are often limited in scope and fail to capture higher-order skills and abilities. The temptation to tailor instruction to the more rudimentary skills more easily captured by standardized test can lead to a "dumbing down" of the program curriculum.

4. Use multiple measures to assess learning outcomes

Assessing learning outcomes with multiple measures will not only make teaching to the assessments less likely, it will increase the reliability and validity of the findings.

5. Question the assessment before you question the curriculum

Before you change your program curriculum to improve assessment results think critically about whether the assessment used was an accurate, reliable and valid way to measure student performance.

Learning Outcomes Assessment: Five Stages of Grief

Adapted from Perrine, R. et al. (2010). From bereavement to assessment. In P. Maki (ed.) Coming to Terms with Assessment, Sterling, VA: Stylus.

Change is never easy. Implementing and maintaining an assessment strategy can bring up a flurry of emotions that cause us to long for times gone by. Grief in the face of this change is natural and expected reaction to change. Using the Kubler-Ross Five Stages of Grief, Perrine and colleagues from Eastern Kentucky University have described the typical cycle of assessment bereavement:

Stage 1: Denial

It is early in the assessment process and it is hard to see why all of this is necessary. You might convince yourself that, despite being at the forefront of educational best practices for decades, learning outcomes assessment is just a passing fad. If you just keep doing what you have always done, it will pass. Besides, you already assign student grades and shouldn't that be enough?





Stage 2: Anger

Ok, so it looks like this learning outcomes assessment stuff isn't going away. But that doesn't mean you have to like it. You are sure other parts of your work will suffer as a result, and that's not fair to you, or your students.

Stage 3: Bargaining

By taking control of the assessment process you feel confident that at least some good will come of your efforts. You start to think how participation in the assessment process may be used to leverage additional resources for the program. If you are you are going to all this trouble, you (or your program) should be compensated.





Stage 4: Depression

Assessments are completed, but show students are failing to meet the expectations of the program in a few key areas. The assessment measures could be changed to show greater successes, but you know that would only hide the truth. This is not what you were expecting and your efforts feel like a waste. Perhaps you can just ignore the results and forget they ever even happened?

Stage 5: Acceptance

After a long cry with your fellow colleagues, you pause for a moment to consider a way forward. Sure, there are program gaps, but nothing a few tweaks to the program can't fix. You meet with fellow colleagues and students to discuss ways in which the program can be improved. You start to see the learning outcomes assessment process as a tool for program improvement.