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Assessment and Measurement

Online learning environments might require that we modify our preferred assessment methods, especially if we usually rely on exams to determine students' grades, because cheating is unfortunately a significant problem online. True, we can require that students take exams in a proctored setting, or we can specify that they use a lock down browser option if they're taking an exam unsupervised, but neither of these options is foolproof. It's best, therefore, to diversify assessment mechanisms so that we form a more accurate picture of student learning than we can determine with two high-stakes tests.

For instance, students can't easily cheat on their discussion board posts, so these might be more likely to reflect genuine learning, even though it's a qualitative assessment rather than something that's easily quantifiable like a multiple-choice exam.

Assessment questions that require original thought, creativity, or synthesis of information also make it more difficult for students to cheat, since they can't share answers or easily find a correct response on Google. Furthermore, nearly all objective exams measure students' acquisition of facts (low-level learning) rather than their ability to apply those facts to a problem or situation (high-level learning). Because we want our students to be able to mobilize the knowledge they've gained under our instruction and put it to use outside of our classrooms, a simple measurement of factual recall seldom serves as a good indicator of their learning. I could memorize Planck's Constant, for instance, and be able to choose it among a group of similar-looking mathematical expressions on a multiple choice exam, but this does not mean that I actually understand what it means or how to apply it to a problem in quantum mechanics. My physics instructor would need to find additional means for me to demonstrate my knowledge of this crucial concept if I were supposed to prove that I had truly learned it.

On the other hand, even though it's somewhat tedious to write and upload an exam to the LMS, the self-grading feature can be a big help and a real time-saver. Even multiple-choice quizzes and exams can measure more than factual recall when we write them strategically and they align with our course outcomes and objectives. We can't measure our student's learning effectively with low-quality assessments, so taking the time to design appropriate tests, quizzes, or performance tasks can give us a more accurate view of whether our students have mastered our learning outcomes and objectives.

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