Week 6 - Assessments in Online Learning Environments Tyler Wood

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Traditional Classroom Assessments and Online Possibilities

Teaching and learning are in a state of flux, but the danger of having a new paradigm to transition to means we have to be careful not to transition away from everything we did in the past for new ideas. We need to be able to distinguish what worked in a traditional classroom and what will be better in an online classroom. It may also depend on the situation as to which would work best. There is a definite push for a change of education, but we must not throw the baby out with the bath-water. What are the benefits of assessments used in a traditional classroom with a teacher and students in the same physical space and what are the benefits of being able to learn online? What is clear is that we need to incorporate more information and communication technology (ICT) into the learning process.

According to a paper by Cisco, Intel, and Microsoft, "international case studies of innovative classrooms (Kozma, 2003) have documented the use of ICT in which students work in groups to specify their own research topics, search the web for related information, use data-loggers to collect science data or web forms to enter survey data, use data bases or spreadsheets to analyze the data, use email to communicate with outside experts, and use word processors, graphics software or presentation software to prepare reports. Video and audio equipment and editing software can be used to create video presentations of performances to be posted on the web and shared with larger audiences" (2011, p.7).

It seems pretty clear that we need innovation in teaching and learning, but what can each type of class offer us? What are the benefits of assessing in a physical classroom? What are the benefits of assessing in an online class?

Benefits of a Traditional Classroom

One of the benefits of a traditional classroom is face to face interaction. "In online learning, where there is no face-to-face (F2F) interaction, instructors are particularly challenged to convey their intentions accurately and provide appropriate feedback to help students achieve the targeted learning objectives" (Kearns, 2012). According to some professors surveyed by Kearns said "the "incidental opportunities" for communication that exist in a F2F class setting do not occur in an online class" (2012). There are many times throughout the day when a teacher can visually see a child that needs help but does not raise their hand or communicate in any direct way. Without the body language of a classroom, online classes might be missing some teacher/student communication that would benefit the learning of the student. This physical interaction can also help build a stronger relationship of trust and comfort in the classroom. This can have a strong impact on assessing because of the constant formative feedback these interactions offer the teacher. Once the teachers use this kind of formative assessment in class, they can offer quick, timely feedback to the students for adjustments in their work. This body language feedback can help the teacher group students that would work well together as well. This can have some impact on summative assessing group projects later.

The relationship built in the classroom, and watching students do their work in class, can reduce the ability for students to cheat or plagiarize their work and distort the assessment data from formative and summative assessments in the course. If the student is at home on a computer they can have easier access to materials that will help them cheat or copy work without the teacher being able to see it as easily. In a traditional class the teacher will see handwriting and writing style before any summative assessments and be able to discern if it looks authentic or not. In an online class, there are little to no chances of doing that.

Another concern is the lack of immediate feedback with e-mail, discussion boards, blogs, and wikis. "One problem arising from the asynchronous nature of online discussion is the impact of late posting. For a discussion that runs from Monday to Sunday, for example, students in the discussion group may miss the opportunity to fully

engage if some wait until Saturday to begin" (Kearns, 2012). The moment of inquiry might be missed and the question may slip the mind of a student if they have to wait. It may also sideline their further inquiries if they know they will not get an immediate answer. This type of assessing, if graded, can leave the students lost and not able to understand the standards they are meeting. If it is not graded, then it can still be used as formative assessment by the teacher, but the students may not participate and that assessment opportunity may be lost. The traditional classroom would be dealing with classroom discussion in real time, offering real-time formative assessment and feedback and the teacher would be able to easily see who was participating and who was not and differentiate for students when needed.

"On the other hand, even in classes where discussion is sometimes less than robust, students may face the challenge of having to keep up with voluminous postings across multiple groups and discussion forums. As one of the participants pointed out, "Sometimes it's hundreds of entries." (Kearns, 2012). In an online discussion board, there may be just too much information to sift through, for teacher and student.

Teachers might miss an important question, opportunities for encouragement, or even acts of bullying. It may also be too much to attempt to grade, if this is a graded part of the course. Students might be turned away from finding an answer because it is buried under too many posts, or they may get bad information that has not been corrected or addressed by the teacher in time. This assessment would be ineffective for gathering feedback for differentiation or scaffolding because the data would be buried in the myriad of posts.

This is not an exhaustive list, but a few ways that the traditional classroom may be more beneficial for assessing students.

Benefits of Online Learning

The push for a more technologically focused classroom has lead to more emphasis in online learning, but how does it benefit assessing teaching and learning? Some of the

assessment tools used in a traditional classroom can work in an online classroom, but as was mentioned previously, the ability to copy or cheat means there is a natural aversion to those techniques without some alterations. The online technology can also offer brand new ways of assessing the learning of students.

One thing that can happen in a traditional classroom is a great discussion that goes quickly and the teacher can get caught up in it and forgets who made what points and what details were said. This can negatively affect assessing student understanding because the teacher can not look back at the discussion to look for trends in understanding, or misunderstanding, easily. Having a discussion on a blog, discussion board, or posting in a wiki is offering the teacher a "useful record of student understanding of the material" (Kearns, 2012). Having the records of the comments can make assessing the understanding easier and allow for more specific feedback for students later without having to disrupt the flow of the discussion, as would have to happen in a traditional classroom if the teacher were constantly writing notes and not helping with the discussion. Recording extends to using audio or video posts for comments online as well.

Another opportunity for online assessing is the ability to embed feedback on papers using audio or video that can be watched many times by the student to help them even more. Written comments are possible either way, but the traditional classroom tends to rely on paper assignments and homework, where the online classroom tends to rely on digital submissions of the same. Having that format change offers a unique ability to assess and offer effective feedback in multiple forms for the benefit of the students. Recording audio might help save time on corrections for the teacher as well, since they can simple talk while they read through the assignment or homework.

"Simulations are used to help students understand complex systems. But traditional assessments do not examine these novel classroom approaches" (Cisco, Intel & Microsoft, 2011, p 7). An online course has better access to simulations and can embed these simulations into the coursework making it easier for the students to use. This is an

assessment opportunity that most traditional classrooms can not offer at all that can help assess the student's ability to think critically and authentically.

"Concept maps can be used by faculty as a diagnostic pre-assessment prior to beginning a unit and formative assessments during learning activities. Concept maps also provide immediate visual data to faculty on student misconceptions and their level of understanding" (CETL, p. 94). Using visual representations of data and brainstorming can be used in a traditional class, but being able to adjust and interact with the data is only available online. There are many programs that can help students easily create and edit graphs, venn diagrams, flow-charts, and many other visual representations of information.

This list is not exhaustive either, but it shows the possibilities of assessing in an online class that would be beneficial to students and teachers.

How to avoid cheating/plagiarism in online course

In the Kearns study "several of the instructors used ungraded, self-check quizzes and enrichment exercises with automatic feedback to support their students' learning in technical domains. For formal assessment of such material, the typical approach adopted was a proctored exam" (2012). The easiest type of test to cheat on in an online course would be simple answer tests that can be Googled easily, so having non-graded tests of that nature means there would be no benefit to cheating for your grade. That leaves the ability to grade on more critical thinking related testing, writing, or projects of some sort. This is the goal of learning anyway, transferring the knowledge to useful practice, so avoiding cheating might just push testing into a more positive area for student learning. If one must use a quiz or test online there are a few ideas to follow.

- "Keep the percentage of the course grade that is tied to online guizzes and exams low
- Randomize test questions and the order of answers so no two students take the same test

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- Design exams as open-book, take-home exams
- Set a limited window for testing completion" (RIT, n.d.).

Another way to cheat would be plagiarism on writing assignments or projects. If the teacher can "collect student work in multiple stages as it is developed" (RIT, n.d.) it would be easier to see what the student is doing and make it harder to plagiarize because the teacher would be seeing the development of the work and finding that information for a pre-written assignment would be difficult. Trying to plagiarize notes and drafts might prove to be harder than just writing it yourself. This would encourage students not to copy others' work. It would also afford the opportunity to compare to other students to make sure students are copying each other.

"Use authentic assessments" (RIT, n.d.). Another opportunity is to think outside the traditional classroom altogether and have students create authentic work. They can make a video that they speak in, which would be harder to fake than to make. They can use audio and a mix of media that could come from other sources but the synthesis of the information is the point, so they must use their critical thinking skills to accomplish the assignment.

As students learn to cheat in online classes the software will develop ways to counteract that cheating. This will be beneficial to teachers because they will have help catching these problems, where as working in your own classroom means you are on your own to deal with it.

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