TEACHING LARGE ONLINE CLASSES: HOW CAN PROFESSORS PROMOTE ACTIVE LEARNING WITHOUT EXHAUSTING THEMSELVES?

Heather Schmidt, Cape Breton University

Abstract

This 50-minute session featured a discussion about innovative teaching techniques in large online classes, and the associated challenge of keeping the workload manageable for instructors. What are the alternatives to multiple-choice exams? In large online classes (of 50-100 students), instructors often face students who feel "isolated" but who also ironically rarely take advantage of opportunities to engage with other students unless there is a grade associated. This can result in either a barrage of emails between individual students and the professor, or students who withdraw and refrain from asking questions and engaging. Online teaching also presents the instructor with an ever-evolving selection of unique online tools. While implying exciting possibilities for active learning, teaching pedagogy often follows at a slower pace. For example, how can one use real-time interactive tools in a large online class when it is impossible for all students to be online at the same time? I began this session by showing the session participants my two online-course Moodle websites and describing the assignments I have developed for these larger online classes. I discussed the ongoing dual challenge of incorporating innovative, active learning opportunities for students, while also attempting to keep the amount of marking and formative feedback required of me (the instructor) to a manageable level. Session participants asked questions and inserted their own comments and stories throughout this process. We also discussed additional teaching strategies for large online classes identified in the academic literature.

Why Do Students Take Online Courses? Why Do Instructors Teach Online Courses?

One session participant asked: Why wouldn't students prefer to enrol in courses taught on-campus or in blended-learning courses (that feature a mixture of in-person and online interactions)? And under what circumstances would a professor choose to teach an exclusively online course?

In response to the question about professor motivations, I related my own experience of being a newly-hired professor six years ago in which case (a) I was feeling fortunate to have acquired a tenure-track job, and (b) one of my first teaching assignments was a 50 student online course in Personality Psychology. I began my academic career eager to prove myself, to embrace new modes of teaching (I had been upfront in my job interview about having no online teaching experience), and with online courses as a clear expectation in my new teaching load. In retrospect, I could have resisted the online teaching assignment, but it simply didn't cross my mind. Some initial hurdles were encountered such as a lack of colleagues (at the time) who were engaged in, interested in, or even respectful of online

teaching, thus making my first year of online teaching a somewhat lonely experience of learning through trial-and-error. An "Introduction to Moodle" workshop was provided, but everything after that was left up to me. Fortunately, I made the decision to be upfront with the students about my novice status as an online instructor right from the beginning of the course. In some ways, it worked to my advantage that I was learning about the Moodle system and how to teach online, as my students were learning how to navigate Moodle and to be online students; we were "in it together" and frequently united by shared frustrations, which included power outages, periodic stalling of the Moodle site and/or the internet during online exams, on assignment due dates, etc.

To compensate for my inexperience, I administered a midpoint course evaluation and made adjustments to the remainder of the course based on this feedback. This proved to be a good decision for several reasons, one of which included the unexpected fact (to me) that my institution did not engage in the practice of providing course evaluations for students in online courses at the time. (CBU now administers online course evaluations, but struggles to let students know how to access course evaluations, producing low response rates.) If I hadn't made a practice of collecting course feedback from students on my own, I wouldn't have received any in my first two years of teaching online courses. This posed a problem for my job review, renewal and tenure applications, and contributed to my initial feelings of frustration and isolation as an online instructor. CBU is now transitioning from online courses being the domain of sessional instructors, to online courses being taught by tenured and tenure-track faculty, although it has not always been a smooth process.

After my first year, I walked away with the impression that online teaching can be an immense amount of work—because according to Kupczynski, Gibson, and Challoo (2011), it "requires [developing] pedagogical proficiencies, administrative skills, and technical skills" (para. 8)—but I also appreciated the flexibility it allowed. Rather than being pinned down to a set weekly schedule, I was able to adjust my course preparation time to best fit my own needs and timeline. Also I discovered (to my surprise) that I'd actually been able to form closer relationships with my online students, when compared to my on-campus classes of the same size. An online environment makes it harder for a student to "hide in the back" without saying anything, and it also provides a more welcoming, safer environment in which for shy and socially-anxious students to interact. They are not put on the spot, but can instead take the time to collect their thoughts before sharing with the class. Although hesitant at first, several students' confidence level dramatically increased in terms of their willingness to communicate with me and the rest of the class.

Online courses appeal to a variety of students such as those who like the flexibility of earning a course credit with no weekly meeting times, and students with hectic and changing schedules, e.g., varsity athletes, minor league hockey players, nursing students, parents, mature students, and people with full-time jobs. Kupczynski, Gibson, and Challoo (2011) further suggest that "the economic downturn and the rise in fuel costs" (para. 6) increases the appeal of online-courses for students. Online courses at CBU also attract students who previously lived in Cape Breton but have since moved away. I have had online-students from Australia, Tunisia, Denmark, England, and a ship in the Canadian navy, as well as Canadian locations like Alberta, Ontario, New Brunswick, mainland Nova Scotia, and Newfoundland. It is a diverse group of students in each course, which presents both challenges and opportunities. The

students' personal capacity for self-discipline and self-directed learning is a significant deciding factor in determining the outcome of their final grades. Will they acquire the habit of checking the course site on a regular basis each week, so that they keep up with the material? Or will they postpone checking the course site until days before an exam, resulting in missed assignment deadlines?

Balancing Active and Passive Learning Opportunities

One way to encourage students to check the course site on a regular basis and to motivate student engagement with the course material is to update the course site on a weekly basis, rather than posting all content at once. Anand, Hammond, and Narayanan (2015) state that it is useful to keep students "roughly synchronized" because it facilitates "peer conversations and collaboration" (para. 10). I prefer to keep it simple and supplement the weekly textbook readings with a more detailed, "chattier version" of the PowerPoint slides I would show in an on-campus course (incorporating stories and examples). Other instructors post weekly podcasts or videos in which they introduce the weekly topic. (As I explained to the session participants, I am a bit of a technophobe and I dislike the sound of my own voice. As a result, I have yet to embrace this teaching strategy, but likely will in the next few years.)

Another strategy I employ is to provide active/experiential learning opportunities, and to make them account for a significant amount of the students' final grade. I began this session by presenting an overview of the grade breakdown components of my two large online courses: one for a first year course (Introduction to Psychology) and one for a second year course (Personality Psychology):

First Year Course	Second Year Course
60% exams	40% exams
40% Active Learning: (a) Participation Activities (b) Library Research (c) Research Reflection	60% Active Learning: (a) Participation Activities (b) Mini-Study Project (c) Case Study Project

As indicated in the above chart, I employ some conventional passive-learning evaluation techniques such as exams, which are primarily multiple choice, but with some short-answer questions. The Moodle system times exams (closing them when the timer runs out) and marks multiple choice questions automatically, which makes them a useful timesaver in larger classes. Additionally, when there is significant content to cover, multiple choice exams are a standard way of assessing students' understanding (albeit short-term) on a wide range of topics. I personally use a system of proctored online exams and a three day period for each exam. Students may either write the exam in a computer lab on campus at a set time with me as their proctor, or they may submit a Proctor Approval Form to CBU's online course manager, and set a time in the three day period with their proctor. I began to require proctors after discovering that some students were taking online exams as groups and "helping" each other, i.e., cheating. Proctors ensure that exams are an individual effort. I use a three day exam period because it allows students to set times with their proctors that fit with their own schedules and time zones—and it makes my life easier as it eliminates large numbers of students submitting requests for special accommodations. Moodle also allows the instructor to upload large test banks, and can

randomly select a specified number of questions for each student, thus decreasing the problem of students writing the exam early and then sharing the exam questions they remember with their peers.

Although convenient, exams as a method of evaluation are unlikely to result in long-term retention of the course material. I recall being an undergraduate student myself and "mastering" the art of cramming for tests, but also in later years feeling disappointed about how little course material I had actually retained. The memories that stuck with me most involved projects that offered opportunities for creativity and personal choice, as well as experiential learning and/or interactions with other people. They pushed me outside of my comfort zone and challenged me to try things I hadn't done before. In spite of the initial anxiety, they taught me that I was capable of more than I knew. Shouldn't today's online students have these same opportunities?

Anand, Hammond, and Narayanan (2015) argue that online courses need to move from a "lean back" norm (where students are passively entertained) to a "lean forward" mode (in which students are required to engage and interact). I view active learning activities as an opportunity for students to get a small taste of what it is like to be a researcher in psychology. In my first-year course, assignments are simple but still attempt to provide opportunities for students to explore their own interests. For their Library Assignment, I provide a brief tutorial on how to use the CBU library's online tools to locate refereed journal articles, and then instruct students to locate three articles on any topic of personal interest in the textbook and write a short paper about what they learned.

For their second assignment, I provide first year students with links to hundreds of online psychological studies taking place around the world (e.g., databases maintained by the Hanover College Psychology Department, the Social Psychology Network, and Online Psychology Research). Students are directed to pick a study that seems interesting, participate in it, and then write a reflection paper about their experience. (I provide a series of questions for them to answer, as well as a sample paper from a previous student.) It is a useful learning experience and it gives them something concrete to write about in their papers. Some students experience deception (i.e., being misled about the true nature of a study), while others find inadequate debriefing at the end of a study. Others become frustrated by the length of their study and describe in their papers how their quality of responses deteriorates as the study drags on. The questions direct students to critique the study, e.g., "Did the study accurately capture how you feel about the subject matter?" or "What would you do differently if you were the researcher?" They get a direct taste of how psychological research is often conducted, as well as the importance of research ethics, study design, collecting different types of data, informed consent, and treating participants with respect. My hope is also that students will remember this experience if they ever conduct research.

My second-year online course (in Personality Psychology) provides an opportunity for students to carry out their own "mini-study." The textbook contains several short personality tests and students are directed to pick one, create a very simple, testable hypothesis, and submit their proposal to me within the first month of the course. I review the proposals, provide feedback, and intervene if any ethical issues present themselves in the students' plans. Students are then required to "test their hypothesis" by recruiting a small group of their friends and family to complete the personality test they

selected, and write up a short paper about their findings and their experience. Often students say that the project gave them a new appreciation for how psychological research is conducted (rather than only reading about it) and describe the project as "surprisingly enjoyable" and even fun, as they experience the suspense of waiting to find out whether or not their hypothesis will be supported. One session participant inquired how CBU's research ethics board deals with this class project. I explained that I approached the CBU research ethics board (before launching my first online course) and was directed to submit an overview of the class assignment (including all handouts students receive). I subsequently received their approval and continue to resubmit updates each year.

The second term project I employ in this course involves a "Famous Person Case Study." Students are directed to select a famous person who they personally find fascinating, and then analyze that person using the different theories of personality that we cover in class (e.g., Freudian, Big 5, Self, or Determination Theory). To assist the students, the project is broken down into small components: they submit a proposal, four short "assessment" papers, and a final PowerPoint presentation/academic-style "poster," which they post on a class forum to share with their classmates. In the final week of class, students are directed to view the presentations and pick three to evaluate; evaluations are submitted to me privately to encourage honest responses. Students often enjoy this project because it gives them the opportunity to research an individual of personal interest, be it a serial killer or an inspirational hero. Students also report that the project helps them to better understand the concepts discussed in class, thus also preparing them to write exams.

As I disclosed to the session participants, it has taken me five years to whittle down the amount of marking required to a manageable level for this project, and this is still ongoing. Some strategies that I currently employ include: (a) giving students a choice of working on the project individually or in small groups; (b) requiring students to complete only four of the provided theory assessments (this helps to spread out the marking); (c) requiring students to only respond to one of the many posed questions on each assignment; and (d) giving students the option of either skipping all assessments and completing the final PowerPoint presentation for 30% of their final grade or completing the four assessments for 15% of their final grade, plus the PowerPoint for another 15% of their grade. Although it sounds complicated, students appreciate the opportunity to tailor the project based on their own preferences, and it has significantly cut down on the required marking load—thus also speeding up the time that it takes me to grade assignments. I continue to search for additional ways of modifying this project to further reduce the workload required of me. Session participants expressed that they were impressed with the active learning components of the project (and the quality of provided sample student PowerPoint presentations), but also commented that the amount of marking required still seemed quite sizable.

Motivating Students to Engage and Interact on a Weekly Basis

When showing session participants my online course sites, I also spoke about the materials that I post at the top of each website in the first week. One is targeted towards students who are new to Moodle, and provides a site tour: a series of screenshots in which I point out important facets of the site and also explain how different elements of the course will work. Although it may seem obvious, sometimes

overwhelmed first-year (and even second-year) students fail to note the importance of beginning each visit to the course site by checking helpful tools such as the "Calendar" and "Upcoming Events" (which highlight due dates and exams in the month ahead), and the "Recent Events" box (which provides links to all new material the instructor has posted since the student's last visit to the site, as well as notice of student postings to class forums). The tour is entirely optional but useful for students unfamiliar with Moodle and online courses.

I also assign two very simple participation activities for students in Week One. They earn one point for completing each activity and typically a new activity is posted each week. The first activity simply involves introducing themselves to the rest of the class on an online forum. I find this useful because (a) the students learn how to post to a forum, (b) it gets them interacting with each other immediately, (c) it provides me with information about each student's background, and (d) the students get a visual image of just how big the class is. When it takes them a while to scroll through all of the posted course introductions, I hope this gives students a sense of why I (as their instructor) will not be able to grade their exams and papers within a day or two. (Anand, Hammond, and Narayanan (2015) recommend requiring students to introduce themselves to the rest of the class, in order to set the stage for student collaboration and group work.) My other Week One participation activity involves students completing a short multiple choice quiz about the course outline. Students are encouraged to print out a copy of the course outline and informed that they must take the quiz repeatedly until they earn a perfect score, in order to earn their second participation point. This encourages students to read the course outline and ensures that they know information such as how many exams they will take, when the first assignment is due, how often they should plan to check the course site, etc. It also provides a low-pressure introduction to taking a multiple choice quiz in the Moodle format.

At this point, a session participant raised the question of whether the students (young adults who chose to attend university, not children in elementary school) really need to be bribed with easy points to complete obvious tasks, such as reading the course outline and posting to a class discussion. Should we not expect more independence and initiative from students? Should they not want to participate? And if they fail to read course outlines and participate, do they not deserve to risk failing the course? While in principle I agreed that this would be the case, I also explained that when I tried this approach in my first year of teaching online courses, it produced a lot of headaches for me as the instructor. Many students did not read the course outline and instead repeatedly emailed me to ask "obvious questions." I grew tired of repeatedly replying, "Read the course outline." When I created discussion forums with no participation points attached, two or three eager and high-achieving students would respond right away. When nobody else joined in, they would get nervous and email me to check if they'd correctly understood the activity. The less motivated students were not participating at all. By assigning participation points on a weekly basis, most students grow accustomed to checking the course site each week, and it can help them to stay on top of the material and assignments, even if they are lured in with the promise of "easy points." Assigning points also makes my life easier by reducing unnecessary student emails. Anand, Hammond, and Narayanan (2015) agree that incentives must be tied to participation and collaboration, or less than 10% of students will engage.

I currently do not assign grades that assess the quality of postings on the discussion forums, in part due to the larger size of the classes and the time that it takes me read each response. It's simply: you complete the activity and you earn the one point. You don't complete the activity, and you receive a zero. (The majority of participation activities in the courses involve watching online videos and then posting comments, reading short articles and posting impressions, completing short psychological tests, etc.) The session participants discussed the pros and cons of this non-evaluative approach. Admittedly, it reflects a compromise between what I would ideally like to do as the instructor—which is to provide each student with personalized formative feedback—and what I am physically able to do in terms of workload. Unfortunately, as students aren't pushed to truly "discuss" with other students in the week-long timeframe allotted, or to improve the quality of their contributions over time, this approach also permits some students to post low-quality, hurried responses right at the final deadline, without any negative consequence to their grades.

I believe that positive aspects of this approach outweigh the negative, however: when teaching nervous first-year and second-year students, it is useful to put them at ease about participating in university-level discussions. Rather than worrying about trying to produce "the right answer" or "sounding smart," I hope that students feel a safe space is created in which to share honest answers. It also demonstrates that there is not always one right answer, but often multiple perspectives that are relevant to a thorough discussion. Students will not pass the course based on participation points alone (at most they count for 10% of a student's final grade), but they provide the students (who choose to complete them—and not all students do) with some sense of security when going into higher-stress exams and assignments.

Future Ideas for Promoting Active Learning While Minimizing Instructor Workload

One session participant shared that he relies heavily on the aid of teaching assistants to stay on top of his online marking. (He worked at a larger university, with graduate students available to hire as teaching assistants.) CBU, however, is a smaller institution at which upper-level undergraduates serve as teaching assistants, and have been restricted to "objective marking" only. As a result, I do not currently hire teaching assistants for online marking. On the other hand, it served as a useful reminder to me that I shouldn't forget about this option and can seek out more opportunities for teaching assistants.

We also discussed possibilities for decreasing the instructor's workload that encourage students to help each other. Group work, for example, can decrease marking, while encouraging students to learn collaboratively. It needs to be set up with a great deal of care, however, or students become unhappy. (I currently shy away from requiring group projects, although it is something I should revisit.) Peer marking is a concept that I have contemplated but have yet to put into action. There would need to be guidelines and I would need to oversee the process, but in such a way that my workload does not increase as a result. I currently provide a "Question and Answer Forum" on my course sites where students are encouraged to post questions—rather than contacting me privately—and also to help each other if they can. Student usage of this forum, however, tends to be limited and infrequent: although I respond quickly, only a small subset of students uses it. Most students prefer to contact me privately.

I briefly described a paper by Messner (2012) in which he talks about encountering the same situation, and how he finally got his online students to interact by creating a Facebook group. Messner (2012) found that 97% of his students had Facebook accounts and that 49% check their social media several times each day, i.e., more often than they check email or course sites. Clements (2015) similarly found that students are more likely to communicate with each other on social media, while they reserve email and course sites for communication with the professor. Anand, Hammond, and Narayanan (2015) recommend that instructors resist the urge to jump in and answer student questions, and instead allow peers time to do so. While noting that "'Trust the students' . . . [is] one of the hardest axioms to follow," they found that "letting [a question] simmer, can aid learner discovery" (para. 17). This is a valuable piece of advice that is also supported by my personal experience: finding the courage to relinquish control as the one-and-only "expert" in one's online courses is vital both to promoting active student learning and creating a manageable instructor workload.

References

Anand, B., Hammond, J., & Narayanan, V.G. (2015, April 14). What Harvard Business School has learned about online collaborations from HBX. *Harvard Business Review*. Retrieved from https://hbr.org/2015/04/what-harvard-business-school-has-learned-about-online-collaboration-from-hbx

Clements, J.C. (2015, Spring). Using social media as a classroom learning platform. *Teaching Matters Newsletter*. Retrieved from https://www.academia.edu/12136143/Using_social_media_as_a_classroom_learning_platform

Kupczynski, L., Gibson, A.M., & Challoo, L. (2011). The role of online course development and teaching in the merit and promotion process: Is credit necessary or applied? *First Monday, 16*(3). Retrieved from http://firstmonday.org/ojs/index.php/fm/article/view/3356/2837

Messner, M. (2012). Teaching large lecture classes online: Reflections on engaging 200 students on Blackboard and Twitter [Prezi slides]. Retrieved from https://prezi.com/2l2dhvqly9nw/teaching-large-lecture-classes-online/

Author Biography

Dr. Heather Schmidt (heather_schmidt@cbu.ca) is an Assistant Professor of Psychology at Cape Breton University. Her research focuses on community psychology with First Nations and individuals with mental illness. She teaches courses (online and on-campus) in introductory psychology, personality, qualitative methods, community psychology, and history of psychology.