

BRUCE TSUJI: Hello, and welcome to my online classroom. My name is Bruce Tsuji. I'm from the Department of Psychology. And I'd like to tell you a little bit in this prerecorded segment about my online courses.

Specifically, what I'd like to do is I'd like to tell you about those online courses, in particular the ones that were totally online that I've taught between the fall of 2014 and the summer of 2019. And those courses have had in total about 15,928 students go through them.

I'd also like to tell you a little bit about the blended-- that is, online and face-to-face-- courses that I conducted in the winter of 2020 in the semester that just passed. In total, there were about 1,341 students in those.

I'd also like to tell you a little bit about my recommendations, my personal recommendations in terms of what I would like to suggest you do in your online course. And then after this prerecorded segment, I'd like to open it up to a live discussion and Q&A about different aspects of online teaching as determined by your own interests and proclivities.

However, to begin with, I'd like to give you a little bit of context to the kinds of courses that I've taught online. These are primarily Introduction to Psychology 1 and 2. In the psych department at Carleton University, PSYC1001 is concerned with the brain, behavior, research methods, learning, and memory. PSYC1002 is devoted to human development, personality, psychopathology, stress and coping, different treatments.

Each of these is a one-semester course. And generally speaking, we have about 5,000 students per year. Most of those students are actually not psych majors. Only about 10%, about 500 psych majors, take these courses every year.

As you might guess, we have a variety of different sections of these Intro Psych 1 and 2 classes. Some of those sections involve smaller face-to-face classes of about 120 people that involve one-hour weekly tutorials in addition to two-hour lectures per week. Some of the versions, some of the sections of these courses involve face-

to-face classes of sometimes 300, 400, 500 students three hours a week, no tutorials.

And then the totally online, on-demand, asynchronous courses are ranged, generally speaking, between 400 and almost 1,000 students per course. And that's really what I'll be talking about.

So the totally online versions of Intro Psych are asynchronous. That means that students and the instructor do not typically participate at the same point in time. Generally speaking, students are listening to or watching prerecorded video segments. They are taking assessments at different times that, at least in my versions of these, happen whenever they want to have them.

But what's important is that the content and the textbook and me as the instructor are identical to my synchronous, face-to-face courses. This is important because this allows us to compare some of the pedagogical outcomes of online and face-to-face so that you see where online is maybe falling down, where online is perhaps superior to face-to-face, and vice versa.

You can get a pretty good idea of what my online courses look like if you go to my massive open online course at www.ecarleton.ca. That is an open course. All you need to do is register with your email. It doesn't even have to be called an email. It can be anything you want. And as long as it's a legitimate email address, you can log in and experience a version of a totally online Intro Psych course that you can play around with and get some understanding of some of the things that I'll be talking about in just a moment.

So first of all, let me try to describe some of what has happened with my totally online courses. And in particular, when I look at the DFW rate-- that is the proportion of students who end up with a D, an F, or end up withdrawing. For those of you who aren't familiar with it, this is a pretty common measure of overall student satisfaction and generally a measure of outcomes in any given course.

What I've been able to determine over the last approximately five-year period is that my online courses-- again, roughly 16,000 students. My overall DFW rate is about 25%. In comparison, to be fair, my face-to-face classes only involve about 4,000 or maybe 5,000 students in total. That DFW rate is closer to 31%, a

significantly larger proportion.

However, when you look at the proportion of grades in these two kinds of courses that only I have taught-- remember, this is just my courses. So this is my version of these Intro Psych courses-- what we see is a fairly different distribution of grades. In particular, if we look at the online versions, what we see is a pretty low proportion of Ds and Fs and higher proportions of withdrawals.

This is a little bit of a contentious issue. But for me personally, I like to see this. It saddens me terrifically to see any number of students in an Intro Psych course get Ds and Fs. There's no reason whatsoever for them to get that kind of core grades.

I'm actually heartened when I see students voluntarily withdraw. That means they're understanding enough about their own progress to know that maybe I should just quit. And in particular, when we compare the withdrawal rate between online and face-to-face, what you'll see is that my face-to-face withdrawal rate is pretty low.

And this is a very curious thing, particularly when you think about the withdrawal deadline at Carleton, which is currently, of course, the last day of the semester. So why would any students end up with a D or an F in a course when they can wait to the very, very last day of the semester before they withdraw? That's a little bit of a curiosity.

I'm not sure. I'm glad to see relatively smaller numbers of Ds and Fs in my online courses. And like I said, I'm happier to see a large proportion of withdrawals. But again, that's probably a personal preference.

In my online courses, I have a number of different features-- I call them "affordances" or "levers"-- that I can talk at length about but in today's session I'll only treat in a very cursory way. Some of those affordances include-- again, in my online courses-- about 68 modules, 68 video modules with an average of about 11 minutes each.

So instead of a three-hour video lecture, this is taking an entire course that normally lasts about 91 or 92 days. That's the number of days in a semester. Instead of three-hour lectures per week, I've turned them into 68 video modules of about 11 minutes each.

Furthermore, those video modules are explicitly correlated with the chapter structure. In other words, there's a very, very clear correlation between those modules and the different segments of the course, as we'll see in a moment.

And another kind of unique thing, I think, is that there are a total of 87 assessments. All of those assessments are open-resource. I'll describe that more in a moment. And those assessments-- the day and time in which they're taken are completely under the students' control.

Another feature of the online courses is that they're daisy-chained. What that means is that you have to get a certain grade in one in order to open the next. I won't talk too much more about that in today's session. But I can certainly talk more about it at length offline.

I'll also mention something about video controls, the number of controls, or the kinds of controls that students are afforded in these online courses. Video captioning-- sorry, closed captioning-- I won't say too much more about that. Of course, in videos that are prepared well in advance of a course being taught, it's possible to get closed captioning done.

I can also talk about accommodation. Over the five years that I've done these online courses, I've had about 700 or more PMC students, students who have had specific requirements for their participation in the course accorded to them by the Paul Menton Centre. And generally speaking, all of their requirements have been very well accommodated by the online courses.

I'll also say a little bit about chapter 0, which in my online courses is about how to succeed in university, a more general kind of requirement. That is also graded, as we'll see in a moment. I'll also talk a bit about writing and different experiential learning elements in these online courses. And I'll also like to talk cuLearn reports and grade book data that you can collect online but we can't collect in face-to-face courses.

So as I said, these online courses have been turned into a number of modules. So for each of the chapters-- in this case, my PSYC1001 course-- there are seven or eight different video modules, each of which have a mean duration of about 10 or

11 minutes.

Why is this important? Well, it means that each of these learning modules is roughly less than the mean human attention span. This is important because, let's face it, nobody would attend three-hour lectures if it was possible to schedule instead classes that were about 10 or 15 minutes in duration. None of us particularly wants to sit through a three-hour meeting or a three-hour talk when, in fact, for most of us, our attention starts to wander after a few minutes. So this is important-- the fact that I've been able to break it down into a larger number of much shorter modules.

For whatever reason, that's-- OK. Let me go forward. So for what I call chapter 0, or how to succeed at university, those modules break down into these particular subsections, these particular modules. The first one is about me and you. It's about 13 minutes long. Success in university is 16 minutes. Course content-- 11. Assessment-- 14. Textbook-- 6. Your job-- 8 minutes. Cheating-- 11 minutes. Bigger picture-- about 6 minutes.

So this is what I mean about taking the larger lecture and breaking it down into smaller pieces. So each and every one of these can relatively easily be taken on by a student in one fell swoop.

The assessment in my online courses is also fairly unique. As I said before, there are about 87 individual assessment elements. And those are comprised of what you see here. First and foremost is an honor code, which is worth nothing. But students have to do it online before they can do anything else in the course.

There is a reflection worth 1%, which is timed so that it's opened immediately after the students complete the honor code. There are 68 self-tests-- in other words, a small self-test that happens after each and every video module. These are worth nothing. But the students can't go any further until they take these self-tests.

There are quizzes, each of which are worth 5% each. And there's nine of those chapters and therefore nine of those quizzes. They're comprised of 10 questions. They're available for 10 minutes. And students can complete these any time before five minutes before midnight on the last day of the semester. In the way that I've set up these courses, students can take them once or twice. If they take them twice, then the higher score is retained.

They also have a written assignment called What's Their Story. In this, they have to pick some other student in the course and write a little bit about some of the characteristics of that individual. They have to do that any time before day 20 in the course.

A first test-- worth 15%. They have 60 minutes to do that. And they can do that any time between day 24 and day 26. They've got basically 64 hours to complete that test. So any time in that 64-hour period, they can complete test one, which is comprised of, just so you know, 42 questions.

Reflection two-- taken online immediately after test one. Test two-- exactly the same format-- in this case, in a 64-hour period between day 64 and day 66. A third test-- exam, again, same format-- 60 minutes online any time between day 90 and day 92.

They also have a research participation component. This is an experiential learning component in which they can participate in several psychological studies. They can do that any time before 5:00 PM on the last day of the semester. A third reflection is available to them immediately after test three. And most recently, if students complete all three reflections, I give them an additional bonus mark. So they can get up to 4% just answering the reflections.

And so this is a typical assessment plan for my courses. What you can see is that everything or just about everything is available when the students want it. And there's nothing that is worth more than approximately 15%.

Something else that's a little bit different about these courses is I adopt an open-resource protocol. That means that students can use their textbook. They can use their notes. They can use PowerPoint. They can use Google for all of the assessments. The only thing that I do not allow them to do is any kind of communication with others. And for all these assessments, there is a time limit.

I believe that this kind of open-resource protocol is pragmatic for online courses. And I also firmly believe that it's closer to real life. I don't believe that in any part of the real world will students ever be-- or employees, future employees-- ever be asked to answer a question for their manager in which the manager says, but don't ask anybody else.

Don't use Google. Don't use any of the resources that might otherwise be available. But instead answer the question totally blind. No. That's not the case. I think that in the real world, people are encouraged to use whatever resources might be available.

Another aspect of my online courses is there's a terrific amount of data available. There's the log data that's available through cuLearn, which tells me when students tackle each of the modules. It that tells me the day and time that they do so. It tells me how many times they touch the course. It also tells me their IP address.

I also rely heavily on the gradebook data because that tells me when-- since students can take any of my assessments at any time they wish, the gradebook data tells me exactly when they do. How many of them tend to procrastinate and wait to the very, very end versus how many choose to tackle them on a more regular basis?

Another thing that's very interesting is all video at Carleton goes through servers that are run using Cultura. And in particular, what those Cultura servers tell us is there's a content drop-off for all Carleton videos. And if we look across all of the videos that are served by Cultura, about 2/3 only are played through the end.

I can tell you that my PSYC1001 and PSYC1002-- 85% of them are played through to the end. So a substantially greater proportion are seen through, are played right to the end. I'll also say that at least some of Carleton's videos-- people don't watch more than about 50%. So what this online data says to me is that I know more about my online students than I do about my face-to-face students.

Just by the way, you might wonder, what are the poorest-performing videos at Carleton? Well, there's some of the ones that you see in this particular list. And I'm sure that most of you have at one point or another watched some of these. And you may probably be able to agree with me that they are not very inspiring videos to watch.

So briefly, that was my online courses. What I did most recently in the winter 2020 semester is I started out the semester with a blended format. What I did or what I planned for was all of my lectures were face-to-face but with all of my assessments online. I was interested in trying this kind of format.

And like you, in mid March, I was forced to zag or change my overall approach. So as of March 15, I had shifted to online lectures but kept my online assessments. Otherwise, the structure of the three courses I taught this semester was identical between online and face-to-face.

So you see these three courses listed below here-- PSYC1002F, PSYC1002H, PSYC1002J. The numbers under suspended, what the gradebook-- cuLearn gradebook tells me every single one of the students that's ever been enrolled in the course. And for whatever reason, they have been suspended.

These numbers are considerably higher than the withdrawal rates that we see from Carleton Central. And that's because the Carleton Central withdrawal rates are based on the number of students who withdraw after the financial withdrawal deadline. So Carleton's official withdrawal rates are typically much lower than these suspended rates. Nonetheless, I think it's sort of interesting to keep track of these suspended numbers because these are the students who, for whatever reason, had at any point in time in a semester been enrolled in of course and were not at the end.

The number of students who were still standing on April 7-- you see those numbers there. So the totals you see in the third column or the last column. So roughly whatever it was-- 1,300 students in winter 200.

What did we see in that semester? So we had a kind of strange format. But I conducted a survey between April 6 and 10. And 22% of those 1,300 students responded to that survey.

Just a couple of brief things that I found there-- surveyed estimates of course engagement. This is course engagement by students before and after March 14. Basically, those came out the same. In other words, students didn't seem to be too fazed by the switch to totally online, at least in my courses, after the middle of March.

A particularly important aspect-- when I asked them whether there was more or less stress associated with assessments in these blended courses compared to other courses they took, what we see in the graph associated, the bar graph you see here,

is that students found these three courses to be significantly less stressful than their other courses this semester.

I also asked them to reflect at three different points in the course-- once right at the very, very beginning of the course, once after the first test, and once again at the end of the course. One of the questions I asked was, what did you learn in any course in this semester that you will remember for the rest of your life?

What I got were many, many different responses to that question. But some common responses that turned out to be roughly similar in terms of the proportions were I got the same number of insufficient self-control for online courses, as well as students who liked the freedom of choice online. In other words, a lot of the students seemed to detect in themselves an inability to control themselves sufficiently for success in online courses. At the same time, an equivalent proportion just like the freedom of choice that the online courses afforded them.

In terms of the specific content that they liked, roughly the same number of students liked the section on psychopathology, liked the section on stress and coping, and that also liked the section on how to succeed in university. I had explicitly told them that I believe that the component about how to succeed in university was, in the long run, more important for their future success than any other component of the course.

Overall, my recommendations for you for your online courses is first and foremost to deconstruct lectures. If you've got a three-hour time slot per week, please don't record a three-hour video. Deconstruct it. Take it apart. Give them smaller, bite-sized video segments.

A second recommendation is design matters. There's a lot of things that we can finesse in our face-to-face classes. However, online, what is, I believe, happening is students view our online classes in the same way that they may view the apps that they access from their phones or their computers. So if that is the case, then the design of your courses matters almost as much as the content.

A third recommendation I'd like to make is that please, please, please increase the number of your evaluations. And decrease the total value thereof. In other words, there's no reason why you would have to have a midterm or a final exam that's

worth 40%, 50%, 60% or more in an online course. Please make it easier for them. Please decrease the amount of stress that students have by giving them more evaluations but with lower value per.

Fourth recommendation is you're going to have to think about increasing your connection, increasing your support, increasing your presence in your online course than you ever would in a face-to-face course. And there are a lot of different ways to increase that connection, increase that support, and increase that presence we can talk about.

Fifth recommendation is please, by all means, experiment. And acknowledge your failures. In other words, explicitly acknowledge your failures to your classes. If you try something that doesn't work, then come out and say, you know what, guys? That didn't work. So I'm going to take away the assessment value of that last test because that was a complete and utter disaster. And I'll instead design something that will compensate for that.

And together with that recommendation five is the sixth one, which is to break down the fourth wall. A lot of us, I think, tend to do this in our face-to-face classes. In other words, we'll acknowledge that maybe the first two or three classes are a little bit tough because we're getting accustomed to each other. But hopefully a little bit later in the semester, we're a little bit more comfortable.

A lot of us do that, like I say, in our face-to-face classes. But there's a tendency, I think, when we record our lectures, when we record our classes to retreat into a more comfortable place which doesn't acknowledge that fourth wall. And I say to you, it's OK to break it down, even in video format.

In this slide, I've got a few recommendations that-- sorry, a few references that may help you in terms of online course design. And it's on best practices. There's lots and lots out there, especially since COVID-19 came to threaten our lives. But here's at least a few that some of you, if you haven't seen, may be useful to you.

With that, I'd like to end the prerecorded version of this presentation and will now go live for a more active Q&A and discussion section. Thank you very much.