

Transcript for Teaching Talk #2: Academic Integrity in Remote Delivery: Reflection on W20

Dale Lackeyram: Okay it's 1:30 on Monday the 25th. Thanks very much everyone for joining us for another round of teaching talks. As we get started I'd like to welcome you to the Office of Teaching and Learning Teaching Talks. I also wanted to take a minute for us to just sit back and acknowledge that we are currently in different spaces and places that are governed by very different treaties and relationships. In particular now, The Dish with One Spoon covenant and our collective responsibilities to each other and the land is a salient teaching that can inform how we choose to exist in the places and spaces that we work in and that we live in.

As we explore some of the teaching successes and challenges during our COVID-19 responses, I have the pleasure of introducing Doctors Karen Gordon and Brian Husband. They are the Associate Dean's Academic from the College of Engineering and Physical Science and the College of Biological Science, respectively. Karen and Brian will be discussing their experiences with academic integrity in remote delivery during this past winter semester.

With that out of the way, I'm just going to quickly pass it over to Shehroze from our Office of Teaching and Learning, just to give you an idea of how things will be running during the course of the webinar and then we'll pass things over to Brian to get us started.

Shehroze Saharan: Hello everyone. Just a few quick things to remember. As you're coming in you will notice that your microphone and video are turned off and they will be turned off for the remainder of the webinar. So as you come in how you're gonna ask questions during the Q&A session is when you look at the bottom of your screen, you should see a Q&A tab in the ribbon. When you click that, you'll be able to ask questions and myself, Dale and Aron will be filtering through these questions and asking it to the panelists afterwards during the Q&A session. So just remember that please and always stay respectful and ask in Q&A and this message is also in your chat box in the very bottom but you don't have to worry about that because the chat option is disabled for everyone as attendees. With that, I will hand it off to Dr. Husband.

Brian Husband: Thank you very much. Good afternoon everybody and welcome to our presentation on Academic Integrity and Remote Delivery Reflections from Winter 2020. Of course remote delivery isn't new to post-secondary education. It certainly isn't new to the University of Guelph. But as we all know with the pandemic that came in mid-March, many of us were required to use remote delivery for the first time and that also meant grappling with the implications of remote delivery for academic integrity in our courses. And with the dust settling on the Winter 20 semester, Karen and I thought it would be useful to reflect a little bit on how that went and so what we wanted to do today was just briefly talk about some of our perceptions of academic integrity and academic misconduct in a remote delivery format.



Brian Husband: We're going to then give you a little bit of a snapshot of what happened with respect to academic integrity and misconduct in our two colleges and then we'll end by talking a little bit about some of the strategies for going forward and encouraging and enforcing academic integrity within our courses. Of course every form of assessment that we use has its strengths and it has its weaknesses and we can find infinite information on these various strengths and weaknesses in the literature. Either way, it's important to be aware of what those strengths and weaknesses are when we're choosing our assessments when we're deciding what is best suited to the learning outcomes for our course and also best suited for other aspects of the learning environment in which we're working.

Remote assessments are no different. They have many strengths and opportunities and they have some challenges. In terms of opportunities, that just listed a few very brief ones here, there's opportunity in the sense of diversity of mechanisms of assessment, whether it's remote or specifically online and the ones listed here take-home online and online proctored are probably the most common ones that we were employing in the Winter 20 semester. Of course, remote assessments and online, in particular, are highly accessible. They can be taken from just about anywhere. They offer a number of administrative efficiencies in terms of the fact that all students can be receiving the assessment at the same time that there would be less paper involved, and in some cases less personnel, for example, for invigilation. Online or remote assessments also have a huge potential with respect to enhancing learning whether it's to increase collaboration, to increase interactivity and the rate at which feedback comes to students. The mechanisms are diverse and allows students the possibility to learn within the actual assessment themselves.

In terms of challenges, we've already encountered a number of these. First is that at least the online assessments are largely technology-dependent, so the ability to use these rests apart of the availability of internet signal and the necessary hardware. Because of the way remote delivery appeared in Winter 20, this was also somewhat of a source of the student anxiety because of the lack of preparedness for those kinds of assessments.

Importantly another one is another potential challenges around invigilation. It could be quite diverse depending on the form of remote assessment but certainly as we experienced it in the winter, it can be lacking all together or certainly less direct in the sense that there's no real opportunity to be in person invigilating the exams of students spread all across the province in the country. Of course there are mechanisms, such as respondus and other add-on features, that create a lockdown monitor and use a webcam to actually record a student while they are completing their exam. So there are digital mechanisms of invigilation that are available to us and those, I think, offer a great potential.

Bottom line though, is that because of these features, there is a little less control, at least we feel like we have less control, over the academic integrity of our courses and our assessments in particular. The next slide I think just reminds us however, that while the perceptions amongst us and even among students is that the incidence of cheating will be higher in an online environment than face-to-face.

Brian Husband: If you take a look at the literature, it actually shows that very little support for that perception. Most of the research out there that's based on self declarations of misconduct by students shows no higher incidence in online teaching environments than it does in face-to-face. And in addition, most research shows that test performance in online versus in-person assessments is also not different. That's true even when students are randomly assigned to online and in-person assessments within the same course. What might change though is the form of dishonesties that can occur and of course what remains true is that it's important for us to continue to explore ways to encourage and to reinforce integrity in our courses.

Karen Gordon: Great. Alright thanks Brian. So I'm gonna jump in here now and sort of go through, run through what we saw in the College of Engineering and Physical Sciences for academic misconduct in Winter 20. So I'm going to start with directing your attention to the plot in the lower right hand corner of this slide, which shows you the number of academic misconduct cases in this college over the past few semesters. And when you look at this plot at a glance, you'll notice that Winter 20, you know, we had a high volume of cases but it wasn't certainly out of the ordinary which is somewhat in alignment with Brian's previous slide and supports somewhat the literature that we wouldn't expect to see a difference in the number of academic misconduct cases. However, I think we would all agree that what happened in Winter 20 wasn't what we would necessarily call distance education or necessarily even online. It was a hurried attempt to move everything to a different format and as a result, there was a lot of confusion for both faculty and students with that. And so I think this semester is an anomaly hopefully, and that was the idea of sort of giving this talk was that maybe we could learn from this as we move and try to plan for our assessments in the fall semester.

So what we did see in our college in the College of Engineering and Physical Sciences, since March 16th, which was just following our closure our shutdown on campus, is that we did have 56 cases. So the majority of our academic misconduct cases came afterwards. And if I look at the form of misconduct the majority of those are unauthorized collaboration or unauthorized aids. But I think the key thing here that stands out for this past semester is that the majority of these allegations were related to online exams, quizzes, or our take-home exams. So most of them were related to either quizzes or some other form of assessment that were taking the place of the final exam or they were related to the final exam directly.

Now if I compare and contrast that with previous semesters the number of cases for in any of the semesters Winter 18, Fall 18, Winter 19 or Fall 19 that were related to the final exam is 1 to 2. So in this case, we're seeing a large increase in our number of allegations that are related to a final assessment of some sort. Now just a couple comments quickly on how our college shaped up in terms of final exams and assessments. I would say I don't have the exact numbers right here in front of me but roughly half of our instructors decided against giving a final exam and the other half decided to give a final exam and that took place in a number of different formats.

Karen Gordon: Many people chose take-home. Many people chose, we did have instructors choose to use respondus and many people chose to give their final exam within the time schedule given by the Registrar's Office but in a non-invigilated form. So we had all different forms of final exams being given and based on this sort of plot and the numbers that came out, I would say they definitely we saw a lot more cases related to those exams.

The last thing I'll say here is that these are just allegations. So me and Joe Cansolo, the Assistant Dean Academic who helps me with all of the academic misconduct cases, we are still working through interviewing all of these students. So we don't have a summary of how many of these students have actually been confirmed guilty at this stage. So it will take us probably another week to sort through all of that. To summarize, most of our cases were related to the final exam or a similar assessment that was taking place of the final exam and for this college, most of our cases were related to those students accessing some third party website, examples are Chegg, Course Hero, Facebook, there are many that are out there.

I don't know whether anyone out there watches the stock market but if you do, Chegg has climbed immensely over the last quarter and has increased its profits and it's number of subscriptions. So if you haven't heard of Chegg, here's a chance for me to illuminate you. How does Chegg work? Basically Chegg is what's called a student success platform and students can subscribe and pay a monthly membership to it. They can also do things like access textbooks through this. So pay it, pay a flat fee and get a textbook rental and this is one of their biggest revenue generating platforms and then the other side is with their tutoring services. So students pay off monthly membership, they can post a question to the website, and they receive an expert response. As we've seen in some of these cases that expert response can sometimes be questionable and they can actually also the students can put on their post that this is urgent in nature and in some of those cases we've seen that the expert response can come within minutes and so well within the time frame of an exam situation, for example. And these questions that get posted and the solutions are viewable or searchable for any student who has a membership and if you don't have a membership, as our faculty in our some of our faculty in our college have discovered, you can still search these questions and see these questions. You just can't see the solution that was posted without subscribing to the membership.

So the vast majority of our cases related to these final assignments and exams were involving Chegg. So we've had some faculty in our college, which was great, pursued investigation of these cases and I think this is, this is fabulous for a number of reasons. My office needs to work with the faculty, we need to work as a team to promote a culture of academic integrity and sending this message is one way that we can do that. So these instructors have used external search engines, such as Google or Bing, to start typing in the text of their questions that were given on the final exam and they would be able to actually find that question posted on Chegg or Course Hero and in many cases the faculty that were given these exams were able to identify individual students and the reason that they were able to do that was because they had generated pools of exam questions.

Karen Gordon: So, if a student were writing their exam, they could identify which students got which questions out of a given pool and on top of that, they were using random number generation. So that helped to narrow down the class, so that if a question was posted on the Chegg website with specific numbers, they could uniquely identify this student that had received that question in their exam and this proved to be extremely helpful in these cases. In addition to that, I am able to, so Chegg does have an honour code which they have been quite good with this semester, where I am able to confirm with Chegg if I'm given the URL that the faculty member found of the posting of that question, I may be able to write a letter to Chegg and ask for them to take this content down and ask for them to please give me the username which is the email address that is used as well as the time of that posting and the time that that posting was answered. So this helps us nail down whether or not the student posted it during the time frame of the exam and also link an email address to the student. So with all of this evidence in front of us, we've been able to proceed with a lot of evidence, again, for a misconduct case against these students that have been doing that.

So I would say we've had in the neighbourhood of 30 to 40 cases along these lines. So this has been the biggest new sort of uncharted territory for our office. We had dealt with Chegg in the past, but never in a situation quite along these lines. And I think that it's an opportunity for us to send a message to both students and faculty that we can deal with this type of case and I think everyone is learning from it. So that was the biggest sort of finding from our college. And I'll turn it back over to Brian to talk about CBS' misconducts.

Brian Husband: Okay the CBS story has similarities and also differences with the Engineering and Physical Sciences. This is the basically the numbers from comparable for CBS. You can see since March 16th until now, we've got 24 different allegations, so that's about half what sets group from had. And you can see it in the figure I've just shown you what the incidence of allegations is over the last four years and you can see the numbers, while never terribly high, are higher this year than any year in the past. It's hard to know whether that has to do with the higher incidence of misconduct or just a more vigilant group of instructors who have heightened awareness around misconduct in this particular semester.

Like the stats though, we have a bump up in an unauthorized collaboration, unauthorized aids, those forms of misconduct are not typically as high for us and we see a little bump there and we also see, of course, some allegations coming from our online exams as well as from written assignments, which have been held over the same period. Interestingly though, there were no allegations coming from take-home exams so I'm not sure how to interpret that. Just to give you a little bit more detail on the online assessments. I think that's where the challenge was greatest for us, we don't typically have to deal with these cases and as Karen's mentioned finding or at least knowing where the evidence is, in order to actually pursue these investigations, is the biggest challenge since the students are often writing out of our full vision and so it's difficult to assemble enough evidence to pursue some of these cases.

Brian Husband: In total we had two different courses out of 33 that were holding online exams. That's where the allegations came from and really what it represents is actually not just less than 1% but less than 0.1% of all our enrolments in this semester. It's a relatively small number of reports but nevertheless these were cases that we haven't typically dealt with so they represented sort of uncharted territory for us.

All the allegations in the online assessments were unauthorized collaborations or unauthorized aids, so these are cases in non-proctored online exams where the students are working together are collaborating in some form to answer their questions and even in the proctored exams, we found cases of students collaborating but usually using a second device that was available at the time of writing their exams and what they were communicating with each other as they completed the answers.

So pursuing these has been quite challenging. Most of the detection has come from similarity detection software when the questions are short or long answer and we would apply that in the same way we would to detecting misconducts in any other type of exam whether has short or long answer. The respondus videos, the videos with proctored online exams were perhaps the newest ones for us and for those of you who aren't fully aware that this is the software, the add-on, that basically locks down the browser while the student is writing and uses the webcam to track or to record their whole exam. The respondus software does provide a kind of dashboard, that you can see to the right hand side here, that describes a number of different things, including it places flags and various points through the duration of the exam to see them in red there and these are usually some kind of irregular behaviour within the view of webcam; could be unusual movements, could be eye movements, it could be a second person or a different person in the view of the webcam, it could also be issues related to the strength of the internet signal as well. So just because there's a flag doesn't mean that there's a misconduct, but nevertheless respondus reports the flags and then it actually estimates the degree of priority for reviewing that video based on the number of flags that identifies. So with open ends assistance and also with personnel within our college, we view a lot of video for students that have been flagged with high priority flagging and from that information were able in a small number of cases to identify some misconduct taking place. In this case mostly with the presence of a second device within their view but outside of the view of the webcam and it was also the case where they do an environmental scan of their workspace but those scan was insufficient to to see this material. So the biggest challenge for us is how much evidence does one need before one can actually charge a student with misconduct and one particularly cognizant to the fact that it's possible in cases like this for false accusation to be made very easily, so we took this very seriously and it there I would say on the conservative side when making allegations, we looked for two different types of evidence that we would use if we were going to go forward with the guilty finding.

First in some direct observation that something was going on that happened in one case, for example, where the students were literally planning out their scheme in the practice exams so we actually witnessed it all happening before they actually wrote a final exam.

Brian Husband: In the second case, when we don't have any direct observations, what we're looking for is a combination of evidence. High priority flags being present in their video and then some evidence of impact on their performance. So if we saw that the performance in the final was unusually high relative to the performance in the course, this combination of information would often be enough for us to pursue in a little bit more detail. But this is certainly the biggest challenge in these cases. The online proctoring is very powerful but it is also, like any other exam, vulnerable to misuse and making sure we have enough evidence to prosecute cases, is I think the most important thing for us to get right because of the effects it can have on students when they are falsely accused. I'll turn it back over now to Karen.

Karen Gordon: Great, so we're just about through our slides then and then we'll open it up for Q&A. So if we think forward now to the fall where I know a number of instructors are considering remote delivery in the fall semester as well, and we are going to be thinking about assessments in the fall that may need to be proctored remotely or may need to be revised, we can look to the literature to give us some tips on that. So in order to promote academic integrity, the literature says, you know, one of the biggest and most important factors here is that the instructor tries to get to know the students, if that's at all possible, even with remote delivery. Students are much less likely to cheat if they have some sort of an established relationship and they have built some respect with their instructor. And along with that, is if you can create, do activities within the class assessments along the way that create a sense of community within the course, so encourage discussions amongst the students. This also helps to promote just a culture of academic integrity. It's also quite common to see in the literature the suggestion that having a discussion about academic integrity is helpful with the students. So we do recommend that instructors consider putting something in their course outlines that can spark this discussion, potentially on the first day of class, and then you can maybe revisit it at major assessments, about what academic integrity looks like in your specific course with your specific assignments and assessments.

Other tips we can pull from the literature but more frequent, smaller stakes assessments obviously create a little bit less stress and so students may be less prone to try to cheat on something that has a smaller weighting associated with it and if possible, if we can be flexible with deadlines but also helps relieve stress. We know that in a lot of cases of academic misconduct, students tell us that they simply run out of time and they procrastinate like all of us and they run out of time, become upset and frantic, and wind up resorting to cheating. Specifically from this past semester, if I could offer a few words of advice or things that seem to have helped us out. I'd like to pass on this idea that some of our instructors have done where they've created pools of questions such that when they're giving a final exam or an exam or a test of some nature, they can pull randomly from that pool of questions. They can also use random number generation within those questions, such that each student is given almost a unique question on their exam and this obviously makes it much harder to cheat for students and it also in this past semester, has made it much easier to identify which student has actually made a third party post or tried to find a solution to that question.

Karen Gordon: The other thing that's really helped us out in looking at these cases was the recording of the timing of the exam. So if you do administer your exam through CourseLink and using the quizzes tool or something similar to that, and you can actually see when this student accessed began the test and ended the test, that's also been very helpful in a few of these cases to see that time stamp. The last two points on this semester, I have a little star beside the random number generation point there because I wanted to just point out that it won't take students too long, I don't think to figure this out that that's how things happen to this semester and they may start changing numbers but then again if you have an exam that's within a time frame, a designated time frame, like our two-hour exam slot, they only have so much time to worry about trying to change numbers and figure out back calculate back out so I do think this was a very effective strategy.

So then the last two points that I'll just mention and then we'll open it up, are that communicating expectations of academic integrity for every assessment is very important. So students aren't necessarily going to read your course outline if you do have a statement there, they might not have been there if you'd had an in-class discussion about it. So please make sure that you included instructions around what is acceptable on a take-home exam, for example, or a final exam, so that it's clear to the students what the expectations are. Some instructors have started using a statement of appeal as well and if anyone's interested in learning more about that I can provide resources that way. And finally we saw some faculty this semester that, you know, decided that I know that they're going to try to collaborate so I'm going to let them collaborate, so I'm gonna structure my exam in a certain way and allow them to collaborate with two or three other people in the class and almost do like a group take-home exam. And so if we actually encourage that collaboration, this is another creative way to try to mitigate and promote academic integrity and mitigate misconduct. So that's our sort of learnings from the past semester.

Hopefully that provided you some information about what we've been seeing and at this stage I think. So I'll turn it back to Dale and we'll see about having a bit of Q&A.