Chapter 13
Canadian Open Digital Distance Education Universities and Academic Integrity

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Abstract This chapter highlights aspects of open digital distance education universities (ODDUs) that pose particular challenges for academic integrity promotion and academic misconduct prevention. It also provides insight into how these important issues might be addressed. This topic is especially relevant in light of the global shift to online instruction, in part, as a response to the COVID-19 pandemic. Using the 4M Model as a framework, this chapter describes how the macro and micro levels of the university need to work together to promote academic integrity. We provide evidence from the literature that demonstrates that academic integrity issues and solutions are more similar than different between ODDUs and traditional, campus-based institutions of higher learning. Although the context of this book is Canada, much of our discussion applies globally because academic integrity and the move to online education is a growing, global phenomenon.

Keywords Multi-faceted approach · 4M model · Academic integrity · Canada · Higher education · COVID-19 pandemic · Online

Introduction

In this chapter, we argue that despite the unique learning environment of Canadian open digital distance universities (ODDUs), the academic integrity issues and solutions are more similar than different between such institutions and traditional campus-based institutions. In both cases, similar actions at the macro and micro levels of the institution can help promote academic integrity and reduce misconduct. We identify the unique features of ODDUs, as well as the advantages and disadvantages these features pose for ensuring academic integrity. Beyond these features, we discuss challenges for the promotion of academic integrity, some of which apply specifically to ODDUs and others that apply more generally to traditional universities. We then make recommendations for both types of institutions. Where relevant

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we discuss how this applies to traditional institutions that have moved to online course delivery in response to the COVID-19 pandemic. Using the 4M model of the scholarship of teaching and learning as a framework we focus on the institutional (macro) and instructor (micro) levels (Friberg, 2016) and discuss how the institution and instructors must work together to effectively foster academic integrity and reduce misconduct (Christensen Hughes & McCabe, 2006a).

Features of ODDUs and Academic Integrity: Advantages and Disadvantages

Here we identify the unique features of ODDUs that provide the lens for our exploration of academic integrity. We outline specific advantages and disadvantages of these for ensuring academic integrity. The features include open, digital, distance and asynchronous course delivery that are common to Athabasca University undergraduate courses and programs; and those offered through Thompson Rivers University undergraduate Open Learning division (TRUOL, n.d.). Other Canadian institutions that specialize in online learning such as Teluq University (n.d.) and Royal Roads University (n.d.) have only some of these features (Bates, 2018). We briefly discuss online course delivery in response to the COVID-19 pandemic. Where this shares features with ODDUs it is reasonable to surmise it, too, will share some of the advantages and disadvantages for ensuring academic integrity outlined here.

Open. According to Bates (2019), the main characteristic of an open institutions is,

> the removal of barriers to learning. This means no prior qualifications to study, no discrimination by gender, age or religion, affordability for everyone, and for students with disabilities, a determined effort to provide education in a suitable form that overcomes the disability. (p. 377)

Disadvantage. Open universities have minimal admission requirements making it more likely that students are unprepared and do not have the requisite training in proper documentation or a clear understanding of what counts as academic misconduct. This student population is therefore vulnerable to accidental plagiarism and other forms of misconduct.

Digital. Digital, electronic or online delivery refers to a specific information and communication technology (ICT) that has become common in distance education. This could include the use of online platforms and the Internet and can be delivered synchronously or asynchronously (Qayyum & Zawacki-Richter, 2018).

Advantages. Despite a strong belief by some that online courses are more vulnerable to academic misconduct, the evidence suggests this is not the case (Harris et al., 2019; Peterson, 2019). Peterson (2019) states,

> [w]hile a review of the literature reveals that students may be cheating more in on-campus classes, the belief that online classes have a higher rate of cheating remains. In spite of the results found in these studies, many still believe that cheating is easier and is occurring more

often in the online setting. This belief can negatively impact the perceived quality of online courses and the academic reputation of an institution. (p. 29)

"[C]urrent research shows the general assumption that online courses are worse off in terms of academic value or integrity is largely unsubstantiated" (Sterling & Farr, 2018, p. 4). Moreover, Bates (2018) identifies controls such as provincial standards and a centralized course development team, with course content and online pedagogical expertise, that ensure that online courses and programs are rigorous and of high quality. Even though the digital/online feature of ODDUs per se is not a disadvantage for ensuring academic integrity, the fact that students use and access digital technologies may make it easier for students to engage in academic misconduct. We discuss this later as it applies to both ODDUs and traditional universities.

Distance. Donovan et al. (2019) provide this description of distance education: "Distance education courses are those where no classes are held on campus—all instruction is conducted at a distance" (p. 23). To facilitate distance learning, each student is assigned a tutor/instructor who has advanced degrees and teaches in their discipline. Tutors provide instruction, course content support, encouragement, and mark student work. Communication with tutors can be asynchronous or synchronous.

Disadvantage. The distance between students and professors (physical and psychological) may make cheating more tempting for online students (Peterson, 2019). Distance and limited instructor/student contact may prevent development of a strong instructor/student relationship which can result in student anonymity. Further, without a strong connection to the instructor students may feel less guilty about cheating and more tempted to engage in misconduct. Students in on campus institutions with large classes, too, may experience anonymity but the online environment without face-to-face contact may exacerbate this situation (Adzima, 2020). Instructors and students do not have the ease of in-person discussions in asynchronous classroom settings with a student cohort as do traditional universities. It is likely that distance will be an issue for institutions that have been forced to move to the online environment in response to the pandemic. Though, unlike ODDUs, if courses are delivered synchronously, they may have the advantage of increased opportunities for contact, albeit virtual, with students, which may more closely mirror in-person instructor/student contact. Further, online course development and delivery because of the pandemic appear to be decentralized and individually driven by faculty, as well as inconsistent across and within Canadian post-secondary institutions. Some instructors pre-record lectures that are offered virtually at the same time as their in-person class would have taken place. Others have created "virtual" classrooms with the help of video conferencing technologies that students attend synchronously with their class cohorts that may or may not be recorded for later access (Professor A. Levey, University of Calgary personal communication, October 26, 2020). These virtual classrooms may allow for virtual synchronous discussions. Alternatively, discussions are offered through office hours via video conferencing or email communication in which students can expect an immediate response to their questions. Many use a hybrid model that includes a combination of components that may be delivered either

synchronously or asynchronously (Professors A. Schmitter and J. Welchman, University of Alberta, personal communication, October 26, 2020). For those instructors who offer course content asynchronously only, with little instructor/student contact, student isolation and anonymity may be an issue that requires a similar response to that recommended for ODDUs. The quality of teaching, and whether students respect their teachers also relates to whether students decide to cheat (Christensen Hughes & McCabe, 2006b).

Asynchronous Delivery. Course content at ODDUs is delivered through online platforms via a learning management system (LMS) such as Moodle, Blackboard, and D2L and the Internet so it can be accessed when it is convenient to students. Email communication and discussion boards connect students who do not have to be on their computers or other devices simultaneously. As previously mentioned, course development is centralized and involves a team of experts to address quality assurance and the unique nature of asynchronous, digital and distance courses and program delivery (Bates, 2018). Further, continuous enrolment over a 12-month period allows students to take courses at different times, which generally means there are no student cohorts. Courses are not scheduled for a particular time (i.e., they are unpaced). This provides learners greater flexibility to complete course work at their own speed as long as they complete the course by the course end date. In essence, students study "anywhere, anytime" (Athabasca University website, 2020; TRUOL website, 2020).

The flexibility and convenience of ODDUs for transfer credits to student home institutions can result in a high number of visiting students, those who take only one or two courses. Some learners choose courses that their home institution does not offer or, because of limited capacity, are unavailable. Others want to accelerate their degree by taking additional courses at a digital distance institution or take one course to see if they are ready for post-secondary learning (Davis, 2001). As many as one-third of learners may be visiting students (Dr. S. Houry, Office of Institutional Studies, Athabasca University, personal communication, October 13, 2020).

Advantages. In digital distance institutions with asynchronous course delivery, when there is no student cohort there may be little interaction with other students, making in-course collusion less likely. Even when contact with other students is possible, such as an in-person invigilated exam, it would be nearly impossible to physically cheat as asynchronous course delivery means that students taking the same course would be writing exams at different times (Hunter, 2016). In contrast, students in classrooms generally have more opportunities to contact peers (Hollis, 2018), and engage in collusion (Harris et al., 2019). Moreover, the move from an in-person to online environment in response to the COVID-19 pandemic, if synchronous, may provide more opportunity to engage in collusion. Much of the evidence to date that points to an increase in unauthorized collaboration and cheating in those courses that have moved online is anecdotal (Jungic et al., 2020; Panico, 2020). However, Grant MacEwan University indicates there was a 38% increase in academic misconduct cases since the start of the pandemic in March to the end of the term (Rossiter, 2020), and CBC News reported that University of Waterloo experienced a doubling of academic misconduct cases over the past year, most of which was attributed to

the upheaval and stress of the pandemic (Duhatschek, 2020). Further research is needed to determine whether academic misconduct is increasing in ODDUs during the pandemic despite its lack of student cohort. Perception of what peers are doing is a strong influence for cheating (Carrell et al., 2008; McCabe & Treviño, 1993), but online undergraduate students often have little access to this information because they are working at their own pace.

In addition, students choosing to study online tend to be older, and age is negatively correlated with cheating behaviour (Harris et al., 2019; Ison, 2014). Intrinsic motivation to learn is another possible reason to expect less misconduct among online learners (Peled et al., 2019). However, if students no longer have a choice about online learning because of the pandemic these factors may become obsolete.

Disadvantage. Although honour codes have been correlated with reduced student self-reports of academic misconduct (McCabe et al., 2012), these may be less effective in an online environment with asynchronous course delivery, for similar reasons that they are less effective in large institutions (LoSchiavo & Shatz, 2011). In both cases, the psychological and physical connection to instructors and peers is weaker, making the internalization of institutional values more difficult, which in turn may minimize the inhibition to cheat. Again, if this is accompanied with increased student anonymity students may be more tempted to cheat. Similarly, with a high visiting student population taking only one or two courses, students may experience anonymity and not identify or feel committed to the institutional academic integrity values making identification and commitment to these values more difficult to establish (Hunter, 2016). Without strong social connections, it seems that honour codes are less successful.

We have identified the unique features of ODDUs and discussed how they may serve as advantages or disadvantages to ensuring academic integrity. We have expanded our discussion to include traditional universities that have moved to the online environment in response to the pandemic. We now discuss some of the common challenges to academic integrity faced by both ODDUs and traditional universities. These include use of the Internet and digital technologies, the failure of faculty to report misconduct cases, and identity authentication.

Challenges for Both ODDUs and Traditional Universities

Internet and Digital Technologies

Access to the Internet and digital technologies can facilitate cheating (Bertram Gallant, 2008) regardless of the type of course delivery. In the case of plagiarism Ison (2014) explains that,

> students at both traditional and online institutions utilize the same types of sources—that is, online databases and literature-thus plagiarism should be expected to be comparable across

institution types. As such, the cutting and pasting of material are equally accessible to both traditional and online students. (p. 278)

Learning management systems that are used by both kinds of institutions include functionality such as discussion forums that if left unmonitored may also provide opportunities for unauthorized collaboration. Social media platforms, chat rooms and instant messaging can connect students with each other and may provide opportunities for cheating and collusion. For example, students create Facebook pages that exclude anyone who is not a student thereby evading the oversight of instructors, and some websites sell previously written papers or test banks to learners so students can see potential questions and answers for quizzes and exams (Daffin & Jones, 2018).

Failure to Report

The literature suggests that faculty do not always cooperate in following academic integrity policy. There are a number of reasons why faculty may choose not to report misconduct when it occurs. Firstly, it may take time away from presenting content (Peters et al., 2019). Faculty may also feel that their job is not to police students (McCabe, 2005), or that teaching about academic integrity is not their responsibility (Peters et al., 2019). Others may believe that the infringement is not a serious enough issue to pursue, especially if they feel they are not sufficiently supported by their administration (de Maio et al., 2019). They may also view the institutional policy as too lenient or too harsh (McCabe et al., 2012). Finally, it can be time-consuming to follow-up on plagiarism or cheating cases (de Maio et al., 2019; Hamilton & Wolsky, 2021).

However, failure to comply undermines academic integrity (Lang, 2013). Instructors who are unwilling to apply the institutional academic integrity policy may then handle misconduct cases independently and informally. By doing so, students are at risk of being treated inconsistently and unfairly (Jendrek, 1989) as instructors may apply different sanctions from one another and from what is outlined in the academic integrity policy. Depending on the individual instructor's view of misconduct, students may be treated either more harshly or more leniently than the policy mandates. This is not only unfair to the students who are sanctioned by their instructors, but also students who are subject to the formal application of the institutional policy, and students who do not engage in any misconduct (Jendrek, 1989). Further, by investigating and sanctioning their own students, instructors may initiate a conflict of interest. Even if most instructors can remain objective and treat their students in an unbiased way, a perceived conflict of interest may be just as damaging as an "actual" conflict of interest. By failing to apply the institutional policy, serial offenders cannot be tracked and may go unpunished (Lang, 2013). Finally and perhaps most important, if instructors fail to comply with the institutional academic integrity policy this gives the impression that instructors do not value academic integrity. "If this is the

message that is being conveyed, why should we expect students to value academic integrity?" (Hunter, 2016, p. 21).

Identity Authentication

With the development of online distance institutions, identity authentication (confirming that the individual registered in a digital distance course or program is the same individual who is submitting the work for credit) became an issue. There was concern students might cheat by registering in courses and programs and yet have someone else complete the work (Lee-Post & Hapke, 2017). With the introduction of the Higher Education Opportunities Act in the U.S., online distance education institutions were required to find ways to authenticate students' identity in order to retain accreditation (Lee-Post & Hapke, 2017). While this was originally identified as a problem for digital distance institutions, identity authentication is also a problem for traditional institutions insofar as students can contract out work for course assignments or download them from web sites purporting to provide "study resources" (Course Hero, 2020, para. 1) and submit them as their own. Such websites provide access to a wide range of assessments and course material in return for assessments uploaded by the student accessing the service.

While cultivating academic integrity and reducing misconduct can be challenging for traditional universities and open digital distance institutions, in the following sections, we offer recommendations on how these can be addressed at the macro and micro levels. First we note recommendations that are unique to ODDUs, followed by those that fit both types of institutions.

Promoting Academic Integrity at the Macro Level

Here, we discuss interventions that help to ensure academic integrity at the macro level, involving the senior executive and administration of the institution who have power to make institutional changes. These include recommendations for addressing the issues of distance, identity authentication, the promotion of academic integrity through a robust academic policy, and demonstrating a commitment to academic integrity. Institutions need to be responsible and provide resources necessary to promote academic integrity and prevent misconduct.

Recommendations Unique to ODDUs

Distance. There are a number of ways to address the physical and psychological distance between instructors and students. Despite the fact that learners and instructors are not in the same room, technologies such as video conferencing platforms and even older highly reliable technology such as the telephone are available that allow for increased synchronous one-to-one contact between instructor and student, and help facilitate virtual discussions. Furthermore, one-to-one instructor/student contact allows for individualized student instruction that could mitigate isolation and the experience of anonymity that have been attributed to an increase of academic misconduct (McGee, 2013). Also, ensuring that the ratio of instructor to students remains small may strengthen the instructor/student relationship. Institutions that have moved to the online environment in response to the pandemic, with limited opportunities for synchronous instructor/student contact will likely benefit from adopting some of these strategies as well.

Recommendations Common to ODDUs and Traditional Universities

Identity Authentication. Although identity authentication is an issue regardless of the mode of course delivery, one advantage of traditional institutions is that with in-person classes instructors usually have more direct personal contact and can monitor students more closely (McGee, 2013). This means they can have students complete course work in the classroom setting which ensures that the students are completing their own work. However, this kind of personal oversight may be duplicated to some degree in the online environment with oral examinations (Harris, 2000), student presentations via video conferencing platforms, and the telephone.

Another way to confirm student identity is through invigilated examinations that require students to produce government issued identification. These can be invigilated in-person or virtually through a remote proctor service (Lee-Post & Hapke, 2017). However, since the pandemic, in-person exam invigilation is not an option and is being replaced with alternative assessments and online exams that may or may not be proctored remotely. In the future, it may be possible to institute certain COVID-19 protocols to minimize health risks of in-person invigilation though synchronous exam invigilation would require large seating capacities which may be impractical.

Besides standard government identification, remote proctor services use technologies such as advanced biometric technology that use facial and voice recognition and fingerprint identification to confirm student identity, although the costs of such technology may be prohibitive to students and many post-secondary institutions (Lee-Post & Hapke, 2017) argue that the above technologies help establish the identity of students when they login but "presence or continuous" (p. 138) identity authentication is necessary to ensure it is the same student who completes the assessment.

Video monitoring, which may or may not be recorded, can accomplish this (Lee-Post & Hapke, 2017).

In addition to the costs associated with remote proctoring, student privacy is a concern (Lee-Post & Hapke, 2017). The issue revolves around the use of web cameras for monitoring students as they write their exams in the privacy of their own homes. Some have described the practice as invasive and Orwellian and that learners feel intimidated and spied upon (Hubler, 2020). However, when live proctoring is utilized via a web camera, one might question whether there is much difference between being monitored by a person remotely and being monitored by one in-person since they are both forms of surveillance.

Besides a concern about invasion of privacy, perhaps a more serious concern is the sharing of students' personal data by proctoring services (Hubler, 2020). Institutions should assess relevant policies on privacy and confidentiality before outsourcing proctoring. Even where alternative assessments can effectively replace exams, without procedures to establish student identity, it is possible that none of the student's course assessments are completed by the individual registered in the course. If institutions feel that identity authentication of students is integral to the prevention of misconduct, until in-person invigilation once again becomes viable, one alternative may be to offer at least one online assessment that makes use of remote proctoring. For professional degrees that require examinations for accreditation remote proctoring may be the only viable option. We have discussed some of the general concerns surrounding remote proctoring. Different types of remote proctoring services which use different technologies and processes will present other challenges, but technology may improve over time as well. When deciding whether to use a remote proctoring service, institutions should consider whether the advantages outweigh the disadvantages. These recommendations are imperfect but in a post-pandemic world, choices for preventing misconduct may be more limited.

Academic Integrity Policy

Honour Code. As previously mentioned, honour code systems may be less effective specifically as they apply to ODDUs but they are also less effective more generally within a Canadian context (see Eaton & Christensen Hughes, 2022). However, because it is not the honour code itself that reduces cheating but rather the values of academic integrity, honesty, trust, respect, fairness, courage, and responsibility (ICAI fundamental values, 2021) that are supported by the code, these can be facilitated in ways other than strict adherence to an honour code system (Lang, 2013). An institution needs to go beyond simple endorsement of those values and implement policy that supports academic integrity and enforcement of the rules when there are violations of academic misconduct. Even McCabe, a staunch supporter of the honour code system, supports the view that an honour culture is possible without an honour code and argues that the messages behind this would be meaningless without the enforcement of rules and policies (McCabe et al., 2012). Since the policy supporting

academic integrity requires commitment from instructors and students, it is crucial that senior administrators consult with them when crafting or updating the policy. Student and instructor participation and ownership in a system of academic integrity are key for its sustainability (McCabe et al., 2012; Morris & Carroll, 2016). We now turn to the important characteristics of academic integrity policies.

Clear and Comprehensive Policy. Regardless whether a policy is created for digital distance institutions or face-to-face ones, it must clearly and comprehensively cover current categories of academic misconduct and be updated regularly for it to be effective. Researchers in Canada (Stoesz et al., 2019) reveal that many policies fail to use relevant language to address contract cheating and hence should be revised. Regular updating and revision ensures that the policy includes the most current methods of cheating and misconduct.

Since instructors have different views regarding what should be reported as academic misconduct, reporting procedures and the amount of individual instructor discretion must be made clear (Morris & Carroll, 2016; McNeill, 2022). This helps to eliminate inconsistent reporting of violations of the policy that confuse students. Further, if the policy permits instructors to handle minor infractions of misconduct on a discretionary basis, these cases should be documented for tracking purposes (Lang, 2013). Documentation ensures that the same students do not get multiple "teachable moments" without consequence. Keeping this record confidential and on a need-to-know basis until after a misconduct investigation is concluded is important to avoid bias against students based on their past behaviour.

Including a range of penalties may address faculty resistance to policy implementation on the grounds that the penalties are either too harsh or too lenient (Morris & Carroll, 2016). Penalties can be sufficiently severe to handle egregious cases (expulsion) but include softer penalties (reprimand) and education for minor cases (Morris & Carroll, 2016). To develop a culture of academic integrity further, interventions that enhance the moral education and character development of students could include participation in an academic integrity tutorial and some form of remediation. Elements of restorative justice (Benson et al., 2019) that address moral education and encourage offenders to take responsibility for their actions also could be included (Kara & MacAlister, 2010; see also Sopcak & Hood, 2022).

Demonstrating Commitment to Academic Integrity. In order to foster a culture of academic integrity effectively, the institution must itself serve as a model and demonstrate a commitment to academic integrity (Whitley & Keith-Spiegel, 2001). Not only is it important for the institution to do so, but it is equally important that it is perceived to have done so. Even if the institution is committed to upholding academic integrity, unless faculty, students and staff perceive this to be the case they may be less inclined to follow suit. Next we consider recommendations more applicable to ODDUs; then we present more general recommendations.

One way administrators can show commitment to academic integrity is to put words into action and provide the necessary resources to foster academic integrity. For example, professional development surrounding course and assignment design can help instructors create pedagogically sound courses and less cheatable assessments (Eaton et al., 2019). It is especially important for ODDUs that have a centralized

team based course development system, asynchronous course delivery and continuous enrolment to support nimble course development and design systems. Unlike traditional universities, ODDUs can have different course start dates, which means learners complete assignments and take exams at different times, so assessments are not easily replaced. If several hundred students are enrolled in a single course over the year, it is not clear at what point assignments and exams should be changed. Nonetheless, nimble processes are necessary so new assessments can be created, especially when assessments become compromised.

For both ODDUs and traditional universities, there are many ways the institution can demonstrate to instructors a commitment to academic integrity. First, administrators can ensure that they follow through and support instructors when they come forward with legitimate cases of misconduct (Whitley & Keith-Spiegel, 2001). Even if faculty perceive their academic integrity policy as fair many are dissatisfied in the way it is applied and enforced (MacLeod & Eaton, 2020). Addressing the lack of confidence in the institution entails transparency and explanation if charges of misconduct are overturned when appealed by students. Adjudications of appeal cases must be seen to apply the policies and procedures accurately, fairly and consistently. Since many faculty members believe they have a responsibility to address misconduct when it occurs (MacLeod & Eaton, 2020), if instructors feel supported by the institution it is reasonable to surmise that they would be more willing to endorse the value of academic integrity themselves and apply institutional policy when it is appropriate. Some faculty members may not be familiar with the institutional policy or may prefer to give an informal warning and not report the infraction, so it is important that faculty are aware of the policy and potential consequences of not reporting (Christensen Hughes & McCabe, 2006a).

To demonstrate more generally a commitment to academic integrity, senior administrators can explicitly endorse academic integrity values (Whitley & Keith-Spiegel, 2001) by posting these prominently on the institutional web site and organizing institutional wide events that champion academic integrity. For ODDUs and traditional universities responding to the pandemic, events such as the annual "International Day Against Contract Cheating" created by the International Centre of Academic Integrity could be hosted as virtual events facilitated with online video conferencing technology. High student participation may help reduce academic misconduct through peer influence given that students who perceive that other students disapprove of cheating report cheating less (McCabe & Treviño, 1993).

Promoting Academic Integrity at the Micro Level

At the micro level, instructors play a major role in fostering a culture of academic integrity. They can help prevent misconduct through academic integrity education, skill development and course/assessment design as well as integrating tools to help students avoid misconduct. These strategies apply regardless of the mode of course delivery.

Academic Integrity Education

Faculty can play an important role in preventing misconduct through academic integrity skill development and education. A fundamental aspect of academic integrity education and a culture of integrity is to ensure students are familiar with the academic integrity policy and the reasons why academic integrity is a moral imperative for all academics. Since it is common for students to receive mixed messages within their own institution about what is acceptable writing behaviour (Eaton, 2017; Sutherland-Smith, 2018) instructors should seek clarification on any ambiguities in the policy to encourage a common understanding. In the end, instructors should uphold the academic integrity policy, and inform students that they, too, are expected to follow the institutional academic policy, why, and what that entails.

Further, instructors can teach students the documentation style of their discipline, including proper citation and paraphrasing (Rossi, 2022) so students have the necessary information and skills to avoid academic misconduct. Post-secondary students may not have been taught how to write papers using sources (Kashian et al., 2015; Peters & Cadieux, 2019), so it may not be surprising that when asked to do so they make mistakes such as forgetting to cite and paraphrasing poorly (Ison, 2017). Even when students are told that word-matching software will be used, cases of plagiarism still arise (Gomez-Espinosa et al., 2016), suggesting that some students are doing this inadvertently because they lack the necessary writing skills. In addition, some researchers suggest that faculty should provide their students with specific examples of cheating and how to avoid these (Eaton et al., 2019), although care in presentation is important so this does not become a lesson in how to cheat. Further, by discussing contract cheating (and other forms of misconduct), students will understand that their instructors are aware of how easy academic misconduct can occur from the Internet and other sources. Moreover, since many students believe their instructors are not aware of contract cheating (Eaton et al., 2019) by being proactive students may choose not to engage in it.

Academic integrity training and awareness is especially important in ODDUs with no academic admission requirements that can result in a student population who may not have been exposed to academic integrity standards.

Course and Assessment Design

Developing academic integrity skills applies to all types of institutions but may be more challenging within an asynchronous online context. For example, there is little opportunity to effectively discuss or present academic integrity content with a student cohort in real time, which is a common technique to promote academic integrity (e.g., Professor E. Gedajlovic, SFU, personal communication, Sept. 10, 2020). Stagg et al. (2013) stress the importance of resources that are self-paced and can be viewed at any time. Online tutorials have this advantage, and they can be viewed repeatedly

for later reference (Owens & White, 2013). Some suggest that learning should be at the individual course level (Schrimsher et al., 2011), and embedded within the course (Greenwood et al., 2014). For ODDUs with asynchronous self-paced online course delivery and a high visiting student population, this approach may be the most effective. However, merely making this material available to students is insufficient for a number of reasons. Students rarely voluntarily access these materials (McKay, 2014; Stetter, 2013), possibly because they are not engaging (Kier, 2019). Greenwood et al. (2014) also found that students are not willing to make the time or effort to learn proper referencing because it is "a tedious, technical chore" (p. 450). Further, in light of the COVID-19 pandemic students are dealing with the multiple demands on their time. Based on this evidence, mandatory completion of these types of tutorials may be best (Benson et al., 2019). In addition, reinforcement of a single tutorial presented at the beginning of the course may increase effectiveness (Stetter, 2013). A few short activities and reminders of integrity increase academic honesty (Sterling & Farr, 2018). Although online tutorials meet the unique needs of asynchronous course delivery in ODDU, they are also beneficial for use in traditional institutions.

Instructors are responsible for assignments and exams in their courses and these can be adapted to reduce cheating. Assignments that are engaging, creative, and original are least likely to be plagiarized. For example, authentic or grounded assessments that tie students to time, place and the personal effectively engage students to learn and reduce misconduct (Lang, 2013; Bens, 2021). Along with assessment design, a number of different versions of the exam can be created by implementing automated randomized questions that are randomly distributed to students. This may help to minimize cheating opportunities (Krsak, 2007).

Course design can address time management challenges that affect all students regardless of the mode of course delivery. However, this may be more significant in ODDUs because there are no fixed deadlines for assignment submission beyond a course completion date. Providing sample schedules with suggested timelines for assignment submissions can serve as a useful guide for students. For both traditional institutions and ODDUs, providing an online tutorial with time management resources and information encourages students to develop time management skills. For ODDUs, an embedded tutorial enables students to produce an individualized study plan for the submission of assignments and the completion of their online course (Hunter, 2016). An individualized study plan can help prevent rushed work and possibly remove the need to engage in "panic cheating" (as opposed to planned cheating; Stuber et al., 2009, p. 5).

Conclusion

This chapter has used the 4M model to identify and review the roles of the institution at the macro level, and the instructor at the micro level, at ODDUs. By identifying the challenges to establishing a culture of academic integrity both more generally and specifically as they apply to ODDUs, we have offered recommendations on

how these challenges might be addressed. While some barriers exist, engagement of individuals at both the macro level and the micro level can serve to create a culture that fosters the values of honesty, trust, respect, fairness, courage, and responsibility (ICAI fundamental values, 2021) and prevents misconduct in Canadian open digital distance education universities.

We have demonstrated that approaches to the promotion of academic integrity and prevention of academic misconduct are more similar than different between ODDUs and traditional universities. We have also tried to address, at least in a preliminary fashion, the complexities in connection to academic integrity that traditional universities face with the move to online course delivery because of the COVID-19 pandemic.

Further Research Opportunities and Unanswered Questions

As we move forward in a post pandemic world many questions arise, the answers of which will have significant effects on education environment and academic integrity, not only in Canada but also globally.

- How will the COVID-19 pandemic affect academic integrity for both ODDUs and traditional universities and how will institutions address academic misconduct?
- Will online education in the post-secondary sector become the norm?
    - If so, will universities adopt features from established ODDUs or will there be opportunities to develop innovative features that have not yet been considered?

What seems clear based on our research is that approaches to academic integrity and misconduct may vary to some degree based on course delivery but for the most part are equally applicable regardless of the delivery mode. Working together, the macro and micro levels of institutions can help cultivate a culture of academic integrity.

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