

Cheating in online exams at Australian universities

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Introduction

In recent years an ever increasing number of universities have started to offer online degrees. In Australia most universities offer online degrees, however, this study will take a closer look at an organisation which offers the largest selection of online courses. For the purposes of this study the organisation will be referred to as “online degree providers” (ODP).

Along with this new method of completing degrees comes new forms of academic dishonesty and misconduct. Academic dishonesty and misconduct among students is not a new phenomenon.

As universities around Australia and the world are offering an increasing number of courses and degrees online, it is important to plan how to deal with the problem of academic dishonesty and misconduct. In 1990, the American Council on Higher Education reported that cheating at was on the rise at universities in the United States (US). In recent years, there has been a great deal of research in the area of academic dishonesty, most of which almost exclusively focused on the US.

This research considers academic dishonesty broadly, the focus of the paper is on cheating in online exams. Other sorts of academic dishonesty, for example plagiarism or employing assignment-writing companies, are beyond the scope of this paper. With many courses using an end-of-subject exam for up to 60% of the student's overall mark for the subject, it is vitally important that cheating in exams be addressed.

This paper contributes to the limited research literature on academic dishonesty and misconduct in online programs and online exams at Australian universities by taking a close look at what academic dishonesty and misconduct is and how it is happening. It is important that these questions be understood because, students who cheat at university are more likely to become professionals who in the future will engage in illegal, unethical or immoral behaviours in the workplace.

Background

Glater (2006) warns of the alarming magnitude of cheating among university students, the increasing pervasiveness of the phenomenon within academia and the detrimental impact it might have on the 'real world,' as the decisions student make once they leave university and commence working are influenced by their perception of what comprises ethical behaviour (Lawson, 2004; Teixeira and Rocha, 2006). In their research Brown, Weible and Olmosk (2010) state that 49% of students in undergraduate marketing classes admitted cheating in 1988 versus 100% of the students in an undergraduate management class in 2008.

This paper uses the general definition of cheating from Sheard et al. (2003, p. 92), who defines cheating as "*a series of practices, which cover a range of areas that can be defined as illegal, unethical, immoral or against the regulations of the course or institution.*" This definition identifies the long-term problems that occur when students engage in academic dishonesty: if cheating is illegal, unethical and/or immoral, what will stop a student who engages in this type of behaviour from falsifying records or cheating on an expense account when they enter the workforce?

According to Rokavski and Levy (2007), cheating in general at universities is growing at a rampant rate. Researchers such as Stack (2015) find that academic dishonesty and misconduct at universities nowadays is even more prevalent than in the past due to technological advances, relatively scarce resources and understaffing at universities (Treviño and Butterfield, 1999; Maslen, 2003; Stack, 2015). The most common and widely used notion of academic dishonesty and misconduct at universities is copying and/or cheating on an exam (Teixeira and Rocha, 2010). Hence, this paper examines academic dishonesty in relation to online exams.

Australian universities are not exempt from this phenomenon. Brimble and Stevenson-Clarke (2006) conducted one of the largest studies on this topic that focuses on Australian students. In their research, they surveyed 1,206 students and 190 academic staff across four Queensland universities. They found that academic dishonesty and misconduct is widespread and that universities are not doing enough to limit it. This was confirmed by Wilkinson (2009) and Eriksson and McGee (2015), who conducted research on cheating at Australian universities. These researchers found that more proactive strategies need to be implemented by universities to prevent student involvement in academic dishonesty.

According to research conducted by Lawson (2004), there is a strong relationship between students' predisposition to engage in unethical behaviour, such as cheating in an academic setting, and their attitude towards such behaviours in the business world. Furthermore, research suggests that students who engaging in dishonest behaviour, for example cheating on exams, are less likely to believe that people in the business world act ethically. They are also more accepting of unethical behaviours in business than those who did not engage in academic dishonesty (Lawson, 2004; Brimble et al., 2006). Given the ongoing implications of academic dishonesty, it is important that this subject be further investigated.

Methodology

This research began with an examination of the existing literature on academic dishonesty and misconduct in online programs and online exams.

The literature review was followed up by open-ended, semi-structured in-depth interviews, which asked 13 interview questions and lasted for approximately one (1) hour in length with individuals who have been involved in online exam supervisions, to generate valuable knowledge that will be used to address the objectives of the study. The interviews were audio-taped and later transcribed and analysed.

As the interviews were semi-structured, the order of the questions asked depended on the answers the researcher received. The interview participants were Special Local Invigilator (SLI) or people who had worked as administrators in the area of online degrees in Australia between 2005 and 2016. In this research, 27 SLIs were interviewed and 5 online degree administrators.

After the interviews were transcribed they were analysed using the content analysis method. Berelson (1952:18) describes content analysis is a “*research technique for the objective, systematic and quantitative description of manifest content of communication.*” This method focuses on the actual content and internal features of an interview. It is a very useful tool for semi-structured interviews, since this method can be used to determine the presence of certain words, concepts, themes and phrases within a transcript, so that the investigator can quantify their presence in an objective manner. In order to be able to conduct a content analysis on the interviews, the interviews were audio-taped, then transcribed and then broken down in to manageable categories and then examined using content analysis (Thomas, 1994). For the purposes of this paper, five of the interview questions will be analysed and discussed in detail.

Results

Overall the ODP has a good framework for running its many online courses for the different universities. ODP offers two ways for students to take exams. For those who live within 150km from an examination venue, they sit their exams at any of the examination venues, usually located in all the major cities across Australia. Students who live outside the examination venue must find an SLI. The exams are posted or emailed to the nominated SLI and once the exam is completed by the student, the invigilator mails it back to the university.

ODP on their website states that *“if a student lives more than 150 kilometres from the nearest network examination venue, or the student has a medical condition or disability which precludes travel to a network exam venue they may apply to sit their examinations with a Special Local Invigilator (SLI).”* Students are asked to nominate a SLI and they are also told that *“The nominated invigilator must NOT be a relative, friend or have any vested interest in the student's studies.”* In theory, this system should mean that students are taking exams in an environment similar to that of a traditional university examination; however, according to our research, in most cases ODP does not check who the SLI is and whether they meet the set criteria to be an invigilator.

In this research, SLIs were asked *“Did the relevant university check with you if there is a conflict of interest?”* As indicated by Figure 1, most (97%) of the participants told us that did not contact the SLI at all, not even to verify their identity.

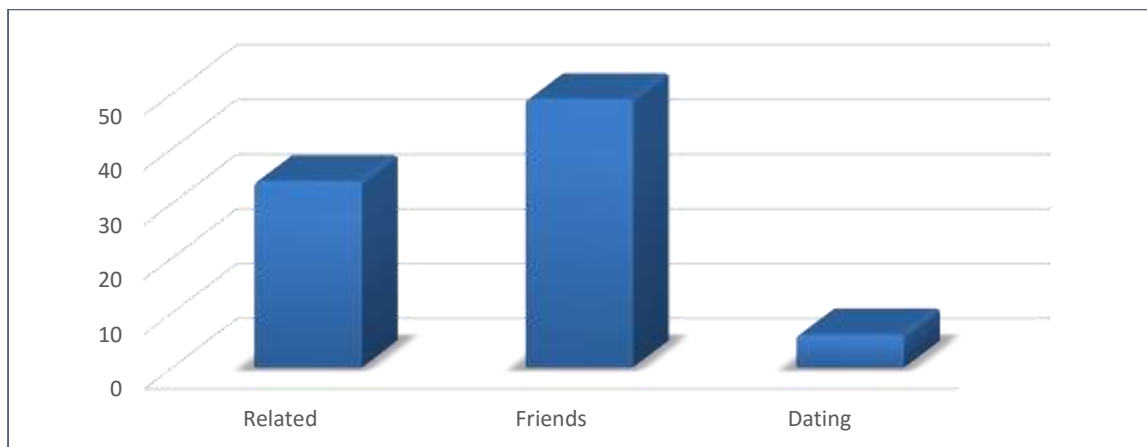
Figure 1 Conflict of interest



In ODP guidelines, SLIs checks are supposed to be conducted but this research findings indicate that in most cases no one actually does them. In practice, the exam invigilator could be fictional, as they are never interviewed and in most cases none of the university's professional staff see or speak to them. The problem this poses is that there are no methods in place to ensure that the students and the exam invigilators are behaving ethically and honestly. The students could get someone else to sit their exam, take prohibited material into the exam or even do the exam over a few days/weeks, rather than completing it in the set exam time.

When the SLIs were asked if they had a conflict of interest and in what way, 85% said that there was a conflict of interest (see Figure 2).

Figure 2 SLIs connection to the student their supervising



As highlighted in Figure 2, 35% participants were related to the student they supervised, 44% were friends and 6% were dating. Yet, they all were approved to work as SLIs for ODP exams.

According to our participants, ODP did not verify the existence of the SLI. ODP also did not check if there is a conflict of interest or whether the SLI had any prior experience in invigilating exams.

This research's findings show that SLIs report that there is little identity checking. This was supported by the administrators, who report that due to short staffing they do not have time to fulfil all of the specified checks.

One is left wondering, that since most (85%) of the SLIs who took part in this research were either related to the student and/or were a close friend and/or are dating – if SLIs do follow all the exam rules.

The participants were asked: “*In your experience, have any of the students whose exam you invigilated tried to cheat? If yes, how?*” A summary of their responses are outlined in Table 1.

Table 1 How and why do student cheat on online exams

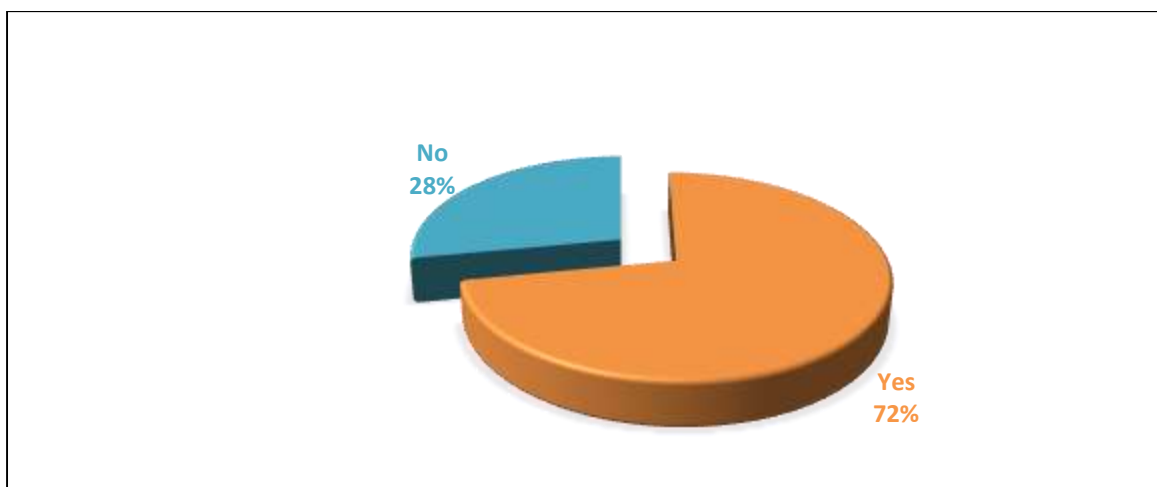
Participant 2	“ODP posted the exams two weeks prior to the exam...I then would give the exam to my friend [the student], who would have two weeks to do the exam...then we would post it back to ODP.”
Participant 9	“I usually would give the students enough time to finish the exam...even if it’s over the set time limit.”
Participant 11	“I had a student who I had to watch like a hawk...he would try to Google the [exam] answers.”
Participant 14	“One of my students who would take toilet breaks at least five times during one exam...I am sure that he was looking up the answers on his phone or maybe called a relative or friend for help.”
Participant 23	“I supervised my wife’s exams and also my friends’ exams...I use the word ‘supervised’ loosely here...I usually would give them the exam as soon as it arrives from the uni...they had at least a week to do each exam.”
Participant 29	“I didn’t get paid to supervise my friend’s exam and I was too busy with my own studies, so I would just give her the exams...so that she can do them [the exams] in her own time.”

Participant 31	<p>“...my friend seemed very depressed and told me her father will financially cut her off if she was to fail her Juris Doctor and she had no job...so, when she got into the Juris Doctor ...she begged me to give her more time [to do the exam]...I guess I felt sorry for her ...as soon as the exam was posted to me, I would give them to my friend and she had about two weeks to do each of her exams...”</p>
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As illustrated in Table 1, some of the SLIs reported that they let the students they supervised cheat on the exams. This supports the current literature, which states that there is strong evidence that suggests that cheating on online degrees is up to four times higher than cheating in a traditional class setting (Moten, et al., 2013). According to researchers such as Means et al., (2010), students perform better in an online setting, which may indicate that some students are cheating.

The SLIs were then asked “*Do you know firsthand of any students who have completed their online degree who have cheated?*”

Figure 3 Firsthand knowledge of a student who completed their online degree by cheating on it



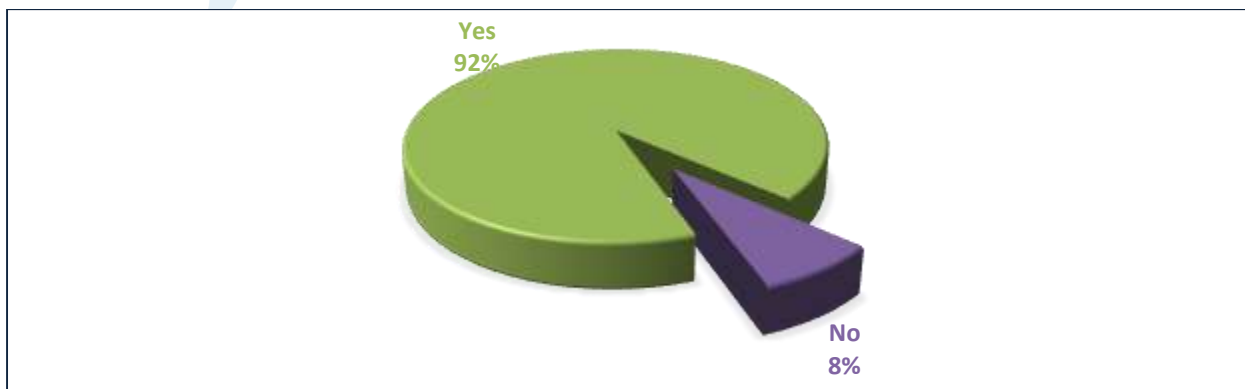
As indicated in Figure 3, 72% of the SLIs who took part in this research knew firsthand of students who had cheated while completing an online degree. This is a concerning finding, as widespread cheating can tarnish the reputation of universities and demean the worth of the degrees granted at them. Additionally, students who cheat to gain their qualifications may not be able to adequately perform the task they were hired to do (Knowledge, 2004).

When the participants were asked “*If you have supervised both students who study the traditional way (face-to face) and students who are doing on online exam – in your experience who were more likely to cheat or try to cheat on an exam?*”

Out of the 78% of SLI that answered this question, 96% of the SLI’s said that in their experience students who are doing online exams – away from major testing centres – were more likely to cheat or try to cheat on an exam.

Currently in Australia student transcripts do not indicate if a student has completed on online degree or not. As the transcript comes from the institution rather than ODP, the institution only awards one type of transcript. Therefore, the SLIs were also asked, “*Do you think that universities should clearly state on the student’s transcript if a student has completed on online degree?*”

Figure 4 Online degree transcripts



The majority (92%) agreed that universities should clearly state on the student’s transcript if a student has completed on online degree. This will give potential employers clear information of how the candidate obtained his/her degree. Adams and DeFleur (2006) did a US based study in which they asked managers to choose between an applicant with a traditional degree (face-to-face) and one with an online degree, 96% (258 managers) indicated that they choose a candidate with a traditional degree for employment in their company. Adams et al., (2006)

findings show that degrees earned online are by no means as acceptable as traditional degrees. Yet, in Australia, universities do not state on the student's transcript if a student has completed an online degree or a traditional degree.

This research indicates that in the area of online degrees, shows that most online degrees will give examinations with little or no supervision, compared to traditional classes where examination is supervised (Stack, 2015).

Recommendations

There has been little research in Australia in the field of online degrees and cheating. Online education has thrived in the last decade, with a growing number of students taking online classes and degrees. With this increase comes an increase in academic dishonesty (Allen and Seaman, 2013; Stack, 2015).

Some research suggests that cheating can be addressed by using biometrics to identify students based on physiological and behavioural characteristics (Rabuzin, Baca and Sajko, 2006; Asha and Chellappan, 2008; Gao, 2012). Biometrics commonly uses soft traits like gender, age, height, weight and ethnicity, physiological characteristics such as face, eye and hands and behavioural characteristics such as keystrokes, signature, mouse movement, voice, gait and pulse to recognise individuals. Two or more of the listed biometrics can be combined to improve the recognition accurateness.

The way this would work is that the student first needs to register a biometric in a system, where biometric templates would be stored. The student then needs to provide the same biometric at registration. The new biometric will then be processed with the same algorithm as those at registration and then compared to the stored template. Some of the biometric systems currently used in universities are Webassessor™ (used by Penn State University) and ProctorU (used by Swinburne Online).

Researchers in this area have proposed that different biometric traits should be combined and used in the field of online learning. However, for biometrics to be effective, universities must give exams online rather than on paper. This is a logical extension to online studies; if students are doing an online degree, then their exams should be online too. Another tool that can be used with online exams is identified by Gao (2012), who suggests using IP addresses as assisting tools to identify collusions.

Although the findings regarding the possibility and amount of cheating in online courses is concerning, there are a number of measures universities can take to minimise cheating, such as ensuring that there is no conflict of interest between the student and the SLI. Introducing penalties and minimising opportunities for students to engage in academic dishonesty and misconduct can be highly effective (Haswell, Jubb and Wearing, 1999). Haswell et al., (1999) researched students from universities in Australia, the United Kingdom and South Africa to examine how the willingness of students to engage in a variety of forms of plagiarism in a risk-free environment decreased dramatically when the detection risk increased and substantial penalties were introduced. They find that the size of the penalty has to exert a greater influence than risk of detection in order to be an effective deterrent. According to Woessner (2004), universities failing to apply heavy penalties can be tantamount to encouraging academic dishonesty and misconduct, as it presents an excellent gamble to students. Those findings, in conjunction with evidence that academic misconduct is highly prevalent in Australian universities, present a worrying picture of student behaviour and the performance of universities in terms of teaching, learning and producing ethical employees.

The findings of this research clearly show that under the current system, invigilators and students are not following guidelines concerning bias, conflict of interest and exam time requirements. In addition, ODP should not post or email the exams weeks ahead to the SLIs (so that they only have three days to return the exam rather than two weeks). Having an online SLI exam log where invigilators register on a website a start and finish time for the exam, which both the SLI and the student sign – so when the invigilator starts invigilating, it is recorded on a university website. They might be less likely to bend the rules if they were required to do more reporting. Universities have the reputation of moving at glacial pace, which means that any change may take some time to be introduced. However, if more universities are offering more and more online degrees and courses, then universities need to ensure that they do due diligence. Universities also need to look at the size of the penalty for academic dishonesty and ensure that it exerts a greater influence than the risk of detection. Research conducted by Haswell, et al., (1999) shows that students' willingness to engage in a variety of forms of plagiarism in a risk-free environment decreases dramatically when detection risk and substantial penalties are introduced.

Conclusion

Academic dishonesty and misconduct is an enduring problem for tertiary institutions worldwide and one that directly impacts on the performance attributes of universities. A growing pool of research shows evidence that suggests that dishonest behaviour by students around the globe is predominant and ever increasing. The literature presents a worrying picture of students' behaviour and in turn of the performance of Australian universities in term of teaching, learning and the worth of the degrees completed by students and scholarship.

Cheating on online exams has serious and negative consequences for the quality of learning in Australian universities and will have flow-on effects on industry and in society. If there are no major changes to policies ensure universities enforce strict penalties and minimise opportunities for students to engage in academic dishonesty and misconduct, the current situation will prevail.

The author proposes that an in-depth case analysis with a large sample size should be conducted to identify what might and what might not work when it comes to the fight against academic dishonesty and misconduct.

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