



## Technology-Aided Cheating in Open and Distance e-Learning

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### ABSTRACT :

One of the major concerns in online teaching and learning in distance education context is academic integrity. Technology has made it easy for learners to cheat. While there are efforts to address this concern based on what teachers know, it is also important to take a closer look on how learners do it based on their own narratives. An open ended questionnaire was distributed to the students of the University of the Philippines Open University enrolled in a Computer Ethics course at the graduate level. The course, including the final exam, is fully online. Fifty-two (52) students accomplished the questionnaire. Specific examples of board posts will also be presented to validate student responses. Results of this study will hopefully contribute towards the development of a Learning Assessment System more appropriate to an open and distance e-learning context.

### 1. INTRODUCTION :

Academic dishonesty has always been a major concern of many universities because it cuts through the heart of the pursuit of knowledge and the purpose of higher education (Lambert, 2003). Many researches in various institutions of higher education and in various countries have studied this social phenomenon in detail (Whitley, 1988 ; McCabe, Butterfield & Trevino, 2006). Even the universities in the Philippines are no exception to this campus epidemic as evidenced by perceptions of faculty members themselves (Pe-Symaco & Marcelo, 2003).

With the advent of open and distance e-learning (ODeL), this moral issue has not waned but has found its ugly claws clutching on to this new alternative to higher education. Open and Distance e-Learning in its academic and fully online form is rather fairly new to Philippine higher education. Although there have been

many recent studies about academic dishonesty in ODeL from abroad (Vilchez & Thirunarayanan, 2011 ; Black, Greaser & Dawson, 2008 ; Dietz-Uhler & Hurn, 2011 ; Stuber-McEwen, Wisely & Hoggatt, 2010), there is still a need to explore more about this phenomenon in this country today. It would be interesting to hear what graduate students themselves have to say about this issue. This study explores certain student perceptions on academic dishonesty in an ODeL environment: (a) its prevalence, (b) the manner it is done, and (c) ways it can be prevented.

### 2. METHODS :

This research aims to explore participant response to the topic of academic dishonesty or more simply - cheating, in an ODeL context. Being explorative, the paper aims to provide more data for further research within this given situation and the

context through the results of the survey.

In researching academic dishonesty, surveys were the most common method used (Whitley, 1998). At the end of the first semester (2011-12 school year) of the University of the Philippines Open University (UPOU), fifty two (52) Master of Information Systems (MIS) graduate students of the Computer Ethics course (IS 201) were given three open ended survey questions to be answered comprehensively in an unstructured response format (text field) within their course site. The Computer Ethics course (IS 201) was fully online to enable the students to gain an ODeL experience necessary for a more valid and reliable answer to the survey questions given them. The questions were included as part of their limitedly proctored final examinations. The student responses then generated qualitative data which would be quantified and interpreted in this paper. Snippets of selected individual students from the discussion forums will also be presented to validate the general student response.

### 3. RESULTS :

Three open ended questions were given to the graduate students. They were asked to answer these survey questions based on their research and readings, and their actual and vicarious experiences. Snippets and excerpts of student postings from the course board will be interspersed in the interpretation of results.

Q1. Where do you think student cheating is more frequent, in a regular face to face classroom setting or in an online distance course ?

The results of the answers of 52 students are as follows: 21 out of 52 which is 40.38% of the class are convinced that there is more cheating or more possibility of it happening in an online classroom. 16 out of 52 which is 30.76% of the class believe that cheating in a regular face to face classroom setting happen more often. And 15 out of 52 which is 28.85% of the class are uncertain

of whether the online or face to face classroom setting provides more opportunity for cheating.

Those 40.38% (21/52) who answered 'Online Distance e-Learning classroom' gave the following reasons:

King, Guyette & Piotrowski made an analysis of students' views on cheating. (King, 2009). Without using the word "cheat", students were asked about their opinion on the appropriateness of activities while taking an online exam. And after the result was deliberated, it turned out that about three-fourths of the respondents believe that it is easier to cheat in an online versus a traditional course. (student-1)

Those taking online courses have unlimited resources at their disposal compared to those in a brick and mortar situation. Thus the online class provides greater possibility for academic dishonesty rather than the traditional classroom.

I believe cheating is more frequent in an online distance course because information is readily available and accessible. Once a student goes online, hundreds and hundreds of answers for assignments, quizzes, or tests can be acquired. (student-2)

Then there is also greater tendency for those in online sessions to be less proctored. Since those taking classes online do not meet professors and students in an actual mode, there is less fear of consequences on those who would cheat or actually cheat. Being anonymous at times gives them that feeling of lesser probability of getting caught. Based on my researches, majority believe that academic dishonesty is prevalent in online distance learning than in traditional face to face classroom setting due to the fact that there is no direct contact between professor and students in the latter and this opens up more ways and possibilities to cheat... Of course, students cheat for a variety of reasons and everyone has his or her own reasons but if one has decided on cheating, he or she increases his chances in an online class. (student-3)

Those 30.76% (16/52) who answered 'Traditional face-to-face classroom setting' gave the following reasons:

Based on a research study conducted by Stuber-McEwen, Wiseley & Hoggatt (2010), faculty members of Friends University, out of 225 students, there were 39 students on ground who cheated and only 14 from online students. There were 138 online number of students and 47 on ground. (student-4)

Cheating could either be panic cheating or planned cheating. Panic cheating occurs more in a traditional classroom setting and makes use of the available opportunity. This is more frequent rather than planned cheating. Hence more cheating is likely to occur in this traditional setting.

Although online long distance courses provide better platform for cheating, research shows that students of online courses cheat less than the traditional classroom setting. The best reason, which I agree with, is that online students are far older and more mature than those who are in traditional classrooms. Traditional students engage in “panic” cheating especially to ease off the pressure of time and seeing other students finishing earlier than them. Online students’ personalities and characteristics seem to classify them as students who would be less likely to cheat. They are more motivated. The motivation to learn and finish the course prevents them from cheating. (student-5)

In terms of numbers, another reason is that there are less people taking ODeL academic courses compared to those in the traditional ones here in this country. Thus there will be less cheating numerically in the formal ODeL classroom and more possibilities in the traditional schools. Another reason for academic dishonesty is the strong competition and high expectations of students to get a high grade. There is less of that in the ODeL setting since those taking this seem to show more maturity because of age. Those in the online classrooms are more in it for the validation of their learning related to their stable profession and jobs. Being younger, those in traditional settings are more prone to cheating to meet higher expectations and to lead the competition to secure themselves the best jobs in the market.

Cheating is still more prevalent in regular

face to face classroom setting than in an online distance course. In fact, cheating in academic institutions even increased for the past three decades. I think this more of the peer pressure that is present in schools. Since students do see each other every day, there comes a great desire to be a greater student than the rest. It has also become more frequent because students are still finding better, even more creative ways to cheat. (student-6)

Those 28.85% (15/52) who answered ‘Undecided/Uncertain’ gave the reasons:

Many past studies are not really conclusive about where cheating is more prevalent. Certain pressures force students to act with dishonesty. And it is the presence of these pressures that will determine the frequency of cheating be it in a traditional or online classroom situation.

The studies of Etter (2006), Harmon (2008) and Klein (2011) indicate that one's perception has a lot to do with how one chooses to behave (in this case, dictates whether the student chooses to cheat or not to cheat). Such perception remains consistent regardless of the learning environment. Rowe (2004) supports this claim too. (student-7)

Another reason is academic dishonesty is not dependent on the delivery of the course but rather more on the integrity of the students themselves. I don't think there is much difference in the frequency of cheating in a regular face to face classroom setting or in an online distance course. Though it is perceived that cheating is more frequent in on ODL, this may not be the case.... Cheating is not dependent on the method of delivery - it depends solely on the integrity of the student. Even if a student has all the opportunities to cheat, if he himself does not condone cheating, then it does not matter whether it is an F2F or ODL course. (student-8)

In summary, the numbers and percentages we have seen is not conclusive as to where cheating could be more prevalent since not one category received more than fifty percent of the votes. And the percentage of the uncertain/undecided could make it swing either way.

Q2. What are the ways one can cheat in an Online Distance course ?

The 52 students offered many ways online cheating could be done or is already being done based on their readings, their experiences, and from their own observation. Below is the result of the survey:

73% (38/52) mentioned identity impersonation, substitution, or proxy attendance as the most common and perhaps the easiest to get away with. Here an online student gets another to do the academic work requirement for him or her. Also included in this category is the use of proxy ghostwriting services or the subscription to paper/essay mills readily available in the internet for a fee.

There are different avenues where students can cheat in an online distance course. Based on the article, "The Shadow Scholar" (Dante, 2010), there are students who employ the use of ghost writers to create academic papers, a very lucrative business. It is also possible for a student to request assistance from other family members or classmates to do the requirements for the course in his stead. (student-9)

69% (36/52) named the search engine and plagiarism duo as a very common way of cheating. Students would "google" terms, ideas, concepts and copy-paste their desired portions on their work "as is" and without even the proper citations. This also refers to copying a classmate's post without the latter's knowledge or consent.

One way of cheating is googling answers or projects. Google has been a way of life of this generation, we have even made it a verb ("Google it."). The Internet being an open source has all the available resources for what we need. Once a student finds what he or she needs, all he or she needs to do is some re-phrasing or re-wording of the work; then it could pass as his or her work. (student-10)

69% (36/52) referred to unauthorized intellectual networking as another method of cheating. Students would collaborate dishonestly and even share files in the process. This involves discussing answers

with each other using forums or even personal chat rooms.

The most common ways of cheating online and even in traditional setting are aiding and abetting. Abetting means letting your classmate copy your work while aiding is helping each other answer an exam. This can also be called "group cheating". Group cheating is done during exams when the students gather and answer the questions together. They will assign questions to each one and swap answers. (student-11)

48% (25/52) said unauthorized technology exploitation especially among the technologically proficient is becoming the more preferred way of cheating. This involves the use of unauthorized devices or processes while doing an online assessment. Unauthorized devices would mean using cellphones, texting, or having a standby tablet or computer while doing an online assessment. Unauthorized processes would mean having another window open or script tools running within the same online assessment environment. Those who are more competent would even venture to hack a course site.

Adjusting the clock in the computer to send late emails but have an earlier date and time. Hacking the website resource (UPOU MyPorta)l. Use of other devices such as mobile phones for texting answers and tabs for opening resources that are unauthorized. There are still a lot of ways where users can cheat in an online distance course. (student-12)

40% (21/52) pointed to unlawful distribution as another source of cheating. Students would ask questions about or "borrow" the works or submissions of persons or groups who have taken the course before them.

If the exam is given online within a 24 hour window, a student can ask the questions from their classmates who has taken them (Halibas, 2011). Downloading or distributing the exam to others is also done by most of the students in an online course. For the same subjects of different classes, the exam questions are distributed depending on which batch gets to take the exam first. (student-13)

35% (18/52) saw deceit and manipulation

as a new alternative to getting away with things in the online course environment. This basically refers to the misrepresentation of one's status or situation and even the fabrication of false alibi to be able to buy time to cheat.

I could have gotten away with the ethics project just by asking my colleagues in the office to pose for the camera (documentation) and not do the actual training seminar requirement. Another form of cheating that could be done is to cheat the hours required to conduct the training requirement. Instead of three hours as required, just make it one or two, just enough for you to take pictures. (student-14)

Another loophole in an online distance course is that there is also a greater chance to provide excuses or alibis. The simple statements like "there was a brownout", "internet was down", "technical difficulty", "email service failure", "file is corrupt", these statements are hard to prove as true. (student-15)

#### 4. DISCUSSION :

##### Q3. How can one prevent cheating in an Online Distance course ?

For this section, the students randomly enumerated a multitude of detailed ways to prevent academic dishonesty in an ODeL course. To facilitate tabulation there was a need to categorize these random ways into their area of focus. Student-16 gave this suggestion: [We could use these] areas of focus to prevent cheating in an online distance course. First is the use of the policies and requirements of the course; [Another] is faculty-student interaction and communication to promote an open and bidirectional communication line between teachers and students; [Then] there is the design of assessment; [And last] is monitoring.

##### 4.1 Policies and Requirements 52% (27/52)

Having clear guidelines and giving the consequences for academically inappropriate behavior help motivate students to academic integrity.

Knowing that the school is serious in protecting the honor and value of the school and the people are taught to be responsible for their school and the people in it, [the students] will bring a culture of intellectual honesty in the school. (student-17)

Requiring submissions involving creativity and personalization of principles also prevent plagiarism.

Employ more hands-on activities, seminar type projects where principles learned are applied, peer collaboration, putting projects online on public spaces... (student-18)

##### 4.2 Interaction & Communication 44% (23/52)

Frequent interaction, no matter how informal, creates good teacher-student relations. Frequent teacher feedback and timely suggestions make the students feel attended too. Frequency of course board discussion and participation of students increase personal knowledge and styles of each other's writing and thinking capabilities. All these help prevent dishonesty in the process.

One way to do so is by having the instructor establish a good relationship and affinity with the students. In this way, the students will deem cheating unacceptable and reproachable. Students will less likely to cheat if they know their instructors are helping them to learn. (student-19)

##### 4.3 Design of Assessment 62% (32/52)

Variety of Test design versions, randomization of items in the question pool, password protection and limit of access to online test, assessment deployment in a secure web browser (respondus lockdown) with a "one question per screen" technique, and oral exams via live chats are some of the suggestions by the students to further the security of online assessments.

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The design of assessment which consist the standards to measure the aptitude and capabilities of students should be carefully and effectively thought of. (student-20)

### 4.4 Monitoring and Evaluating 35% (18/52)

Online proctoring using screen viewers or screen capture (ex. join me) and using web cameras could ensure proper monitoring of students in their assessment. Plagiarism software detection like Jplag, Essay verification Engine, or Turnitin could ensure the integrity of submissions.

Constantly improving the course website particularly its security features, management of files, and accessibility of users could prevent any temptation for security breaches.

As a Senior Web Developer, I would like to see the following security features implemented: IP detection, authentication check, screen capture, desktop application sharing, and a plagiarism detection software. With the implementation of these application tools for the website, we can help prevent cheating and the professors can easily validate the student's work. (student-21)

The strategies enumerated will not completely eradicate academic dishonesty in an online environment. However, majority of the students agree that it is the healthy attitude towards learning that could probably be the best preventive measure against academic dishonesty.

For me, the best way on preventing cheating in an online course, is by inculcating "good academic behavior", I saw this in UPOU as they included Computer Ethics as one of the first subjects in our [MIS] course. I define good academic behavior as the emotional perspective of each student; it is not just in the academic learning, but in the attitude towards learning. (student-22)

## 5. CONCLUSION :

The findings above bring us to certain conclusions about academic dishonesty in

the ODeL environment. The fully online mode of academic learning in higher education is rather new in this country and exists in very few universities. Thus there are few researches about academic dishonesty in this mode of learning here. However it is a fact that as students grow proficient with the technology of this type of education (ODeL), the more they discover how they could go around it. Because of these reasons, students in this survey agree that although the possibilities of cheating in an online environment is greater than in the traditional face to face mode, there is no conclusive evidence as to which environment actual cheating is more prevalent.

As to the ways of cheating online, the students warn us of the dangers of identity and paid impersonation which support the conclusion of Thirunarayanan and Vilchez (2011). The students also point out to plagiarism and unauthorized intellectual networking as the most common ways of cheating.

Finally, as to how cheating could be prevented, students agree on a secure study and assessment environment online. Also, expressing a strong ethical stand through academic policies on the part of the university and giving clear relevant requirements on the part of the professor make the students feel that learning is "non scholae sed vitae" (not just for school but for life).

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