



## Academic Integrity in Virtual Learning during the COVID-19 Pandemic: Case Study of Oman

Hana Al Sulaimi

[hana@bayancollege.edu.om](mailto:hana@bayancollege.edu.om)

Wafa Al Nuumani

[wafa.alnuumani@bayancollege.edu.om](mailto:wafa.alnuumani@bayancollege.edu.om)

Zakiya Al Bassami

[zakia@bayancollege.edu.om](mailto:zakia@bayancollege.edu.om)

Bayan College, Sultanate of Oman

---

### Abstract

*This paper will demonstrate Oman's colleges and university's response to the crisis of coronavirus in regards to the virtual learning and will mainly focus on the academic integrity perspective. It will investigate the point of views of both the lecturers and the students across Oman about their experience in virtual learning. It will emphasize the effect of the shift to the virtual environment of academic integrity. Moreover, it will explore the reasons behind academic integrity violations by the students and find out the appropriate approaches to maintain the academic integrity within the different colleges and universities in Oman.*

**Keywords:** *Academic integrity, COVID-19, Higher Education, Virtual learning, Virtual teaching, Cheating*

---

### Introduction:

Due to the pandemic of COVID-19, the education system had to shift to virtual learning to ensure the continuation of study considering the fact that higher education institutions have already started their semester in the Sultanate of Oman. However, several challenges turned up for both instructors and students because virtual learning was a new experience for almost all of the colleges and universities. It is important to point out that higher education institutions in Oman have been using online platforms as a tool to assist in the education experience but were never fully relied on. Nonetheless, it became necessary at this time to depend on those online platforms and explore other options as well.

Switching completely to the online education was not easily adapted by everyone. Despite the obvious challenges, one of the main concerns that were raised in regard to the online learning is the **academic integrity**. There were already online courses being adapted in some colleges in the Sultanate prior to the pandemic. However, many are still unfamiliar with the whole online learning experience. For that specific reason, significant discussion took place in coordination with the Ministry of Higher Education, Research and Innovation. In spite of this, different colleges and universities have different platforms and various majors and so each had to follow different strategies accordingly.

### Objectives:

1. To identify whether the shift to the virtual learning affected the academic integrity in the colleges and universities in Oman;
2. To identify the reason behind the academic misconduct;
3. To recognize possible solutions to minimize academic misconduct in virtual learning.



### **Literature Review:**

Maintaining academic integrity has always been an issue. However, according to (Hebrling, M, n.d) there was a belief that it is hard to cheat online. That was justified by pointing out that online cheating is easily detected compared to traditional learning. Hebrling's research, nonetheless, proved that keeping academic integrity is equally a challenge in both traditional and online education. MacNabb & Olmstead, 2009 acknowledge that there are also no significant differences between online and on-campus learning when it comes to academic dishonesty or academic integrity. They pointed out that the best practices for developing integrity among students in online learning are very similar to the on-campus learning. Christkis & Christakis, 2012 as cited in Cole & Swartz, 2013, admit that insuring academic integrity is an issue in on-campus as well as in online. (Eaton, S, 2020), on the other hand, believes that there is less academic misconduct in online learning in comparison to face to face classes which was supported by Hart & Morgan 2019, Kidwell and Kent 2008 and Stuber-McEwen et al. 2010. This was justified by the fact that the students who enrolled online are older than the ones who are taking the classes on campus classes and their voluntary took the classes. However, Eaton acknowledges that this is no longer the case. Due to the sudden shift of the colleges and universities to the online learning because of the coronavirus pandemic, the academic integrity in online learning started to pause as a threat. According to Eaton, one of the main reasons for the increase in the academic misconduct in the online classes is due to the extensive amount of stress that the students are experiencing. They are stressed because of the pandemic and the new environment of learning which leads them to make poor choices. In addition to that, Eaton pointed out that there is an aggressive marketing practice of cheating. This is apparent in the abundant amount of social media accounts that offer services of helping students in their assessments.

MacNabb & Olmstead, 2009, acknowledge that developing an integrity environment in online classes will require similar ways to the on-campus courses. MacNabb & Olmstead, 2009, mentioned three approaches that can help create a community of integrity in online classes which are; policy, prevention and virtue. They emphasize the idea that faculty members should encourage the students to focus on learning rather than the grades and help them develop a good personality in the classroom. Stearns 2001, supports the previous point by saying that students who have a good relationship with the instructors are more likely to learn and less likely to cheat. However, Lee-Post & Hapke, 2017, pointed out that there are various measures which should be taking into consideration in online classes to ensure academic integrity that would not be applicable on campus classes. They emphasized that the technological changes had given much space for academic integrity violations and so the measures taken should be addressing those in particular. Cole & Swartz, 2013, assert that there is a difference in academic integrity in online and classroom. They highlighted that in an online setting, the students are unsupervised and has the ability to access various resources, namely; the materials, the internet and other people. According to Lee-Post & Hapke, 2017, there should be a technological authentication program to detect and prevent impersonation where only the students can access and enable the instructor to monitor their activities on the web. Albers, 2007 as cited in Cole & Swartz, 2013, agrees that there should be a sophisticated technology that uses fingerprint authentication and software to prevent students from browsing the internet during the exam.

According to Heberling 2002, it is not possible to eliminate students cheating entirely; however, it can be reduced to the least if both of the instructors and administrations work cooperatively. Cole & Swartz, 2013, accept that maintains academic integrity in online learning is a shared responsibility which begins with the institution's culture to the instructors in designing courses and making questions as well as strengthen the principles of ethics.



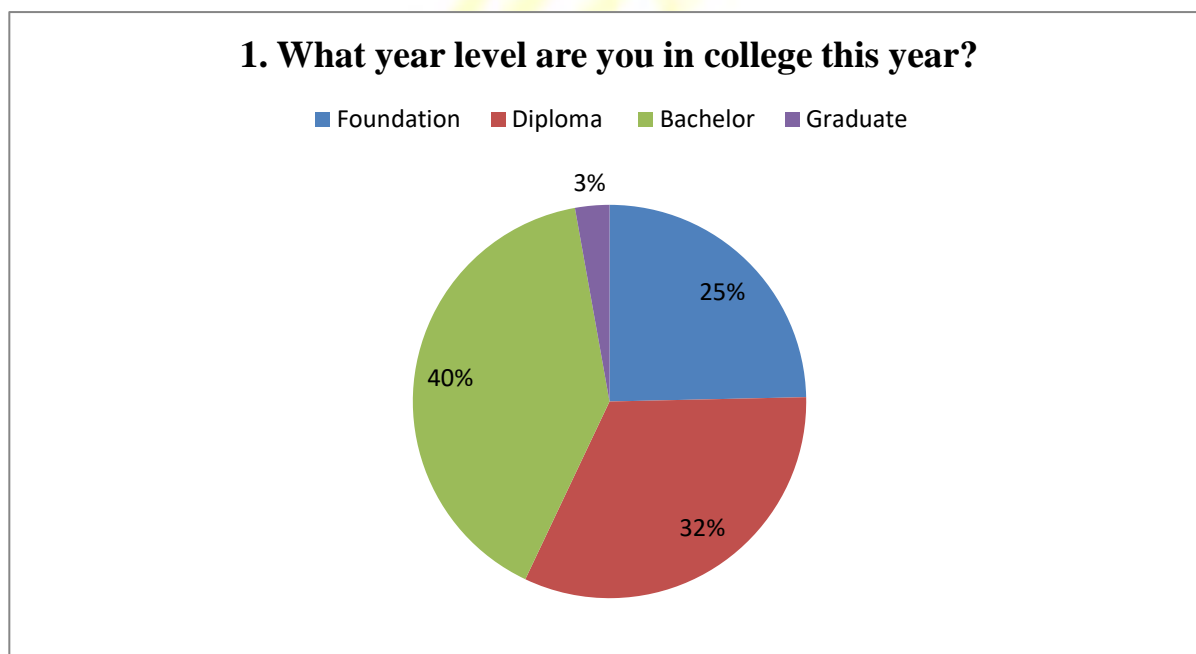
### Methodology:

The methodologies used for this paper aim to find out solutions for the issue of the academic integrity in online classes during COVID-19. The research paper designed to present the results of the issue by collecting data which obtained through surveys. The paper applied quantitative and qualitative methods to observe the main issue.

A survey was distributed to 25 of the academic staff who experienced virtual teaching from different colleges and universities in Oman. In addition, samples of 150 students who are studying online were selected randomly from different colleges and universities in the Sultanate. The surveys were created using Google Forms and were circulated through emails and WhatsApp to the instructors and students.

### Results:

#### Students' Perspective:



The above pie chart shows the level of the students in the colleges and universities for the academic year 2020/2021 who participated in this questionnaire. From the pie chart, it is clear that 40 percent of participants are in the Bachelor Degree. Nearly a third of participants are studying Diploma. Whereas, 25% answered that they are doing foundation program and only a small minority are graduate students.

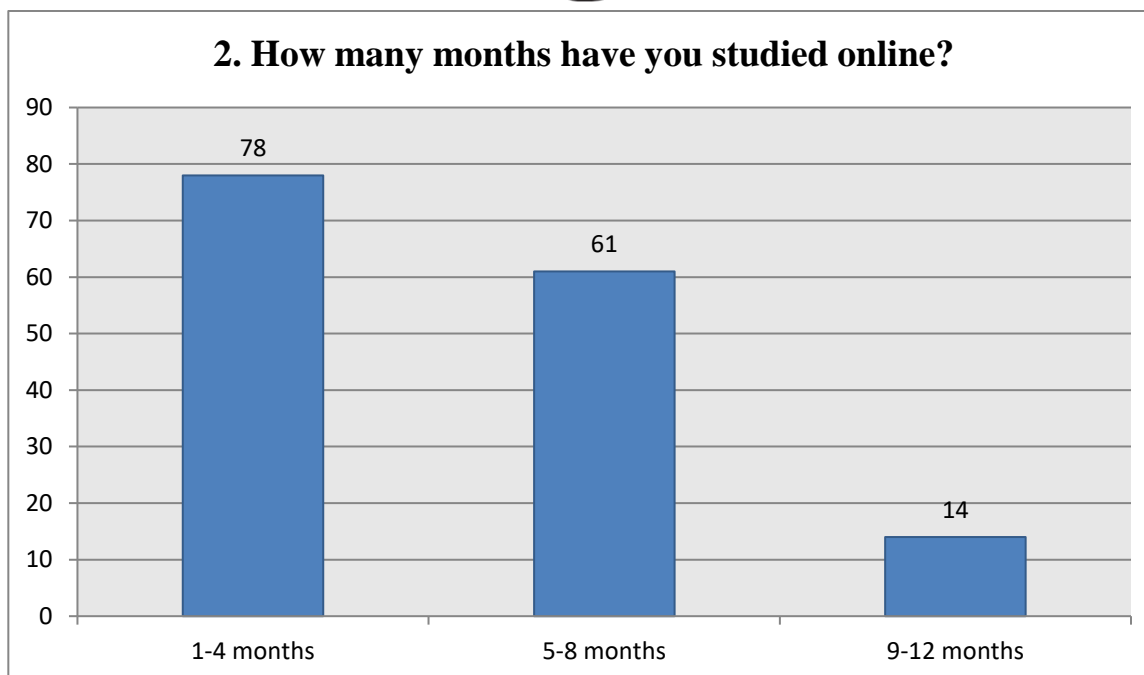


Figure 2

The bar chart illustrates the period of time per month of studying online for the students. The majority of the participants have been studying online for around four months. This is due to the fact that most of the students are in their first year. On the other hand, only about 15% of the students have completed almost one year of learning online.

### 3. What has been the best aspects of studying online?

The students' responses on this question showed a variety of answers. The best aspect of the online learning according to the participants is being able to study from the comfort zone of their home because they are able to eat during the class time and dress up whatever they want. Moreover, more than half of the responses pointed out that the best aspect of studying online is saving time, money and effort. Also, they can attend classes where ever they are. This was an advantage for the part time students as they were able to manage between work and study. Importantly, the lectures are recorded so the students are able to listen to them anytime. Few respondents mentioned that they find it interesting to experience new method of teaching and were able to get a clear feedback from their instructors. In addition, the students are more comfortable to voice out their opinions and discuss freely in the online classes. Nevertheless, a considerable amount of responses was not satisfied with the online learning because they find it difficult to understand the lectures, mostly due to the internet connection issues.

### 4. What difficulties have the students faced?

There are numerous difficulties that the students faced during the online learning. First, the majority of the responses from the students stated that the greatest difficulty in the online learning is the weakness of the internet. As a result, some of them are not able to attend the classes on the right time while the others are facing sound issues. Second, less than half of the participants specified that it is difficult to concentrate during the online classes which affect their comprehension. Third, some of the responses claimed that they have difficulty in communicating with the instructors. Furthermore, many assignments were given to the students which were very stressful to submit them



on time. Lastly, few students acknowledged that they were unable to manage their time during the online and few students were concerned about the health issues that could occur because they spend a long time in front of the screen.

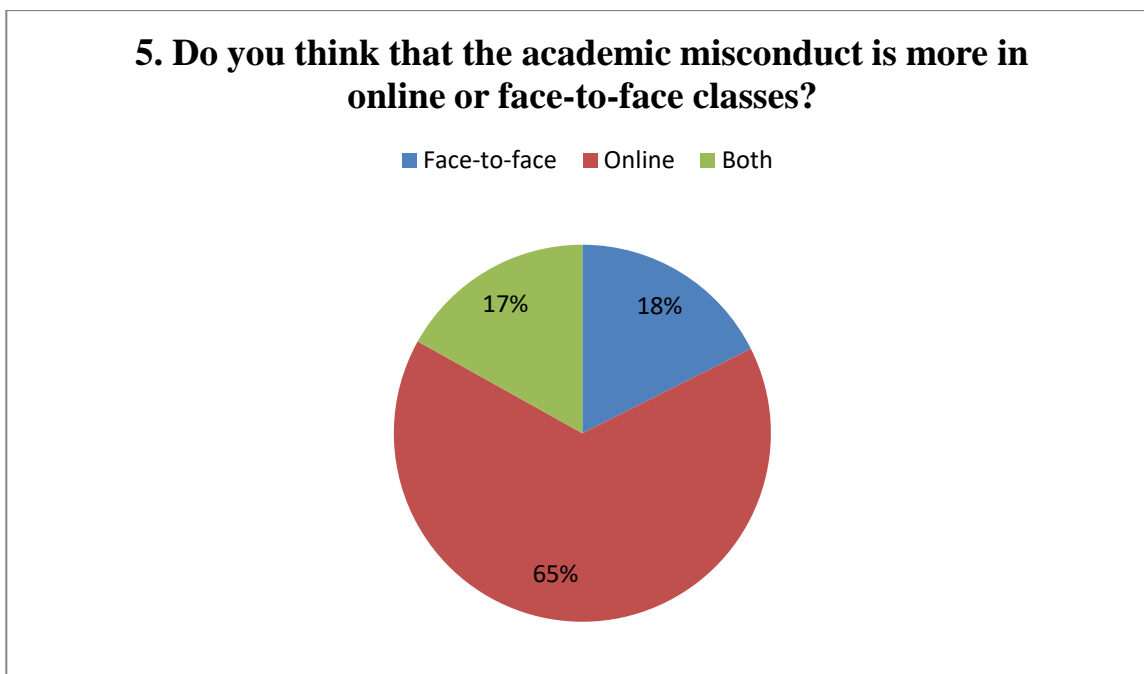


Figure 3

The pie chart above shows that around 65% of the students think that there is more academic misconduct in online classes than face to face classes. However, 18% believed that the academic misconduct is more in the face to face classes, while 17% said both of them.

#### **6. How have your teachers checked the academic integrity of your work?**

The majority of students stated that their instructors are using Plagiarism Checkers Software such as Turnitin to check the integrity of the work submitted by the students. Moreover, half of the responses declared that some of the lecturers give them pop quizzes and individual questions to ensure their understanding. Also, the lecturers are asking the students to make presentations about their submitted assignments during the class. Sometimes, the students are required to come into the campus for a meeting to discuss the assignments. Importantly, students are required to open the camera and microphone during the exams.

#### **7. What ways have you heard some students may be cheating on their assignments, quizzes or exams?**

Most of the answers pointed out that students are using phones through WhatsApp and Google Meet to help each other with the exam questions. Also, they refer to Google and the handout to get the answers to their assignments and quizzes. Furthermore, to avoid camera detection, one of the cheating ways is that the students are sticking their notes on the side of the screen. Moreover, it was pointed out by the students that they sometimes ask their friends to help them on their exams or ask a graduate student for a fee. In addition, some students heard that another way of cheating is by buying the assignments instead of relying on themselves through different channels like Instagram, WhatsApp and Forums.

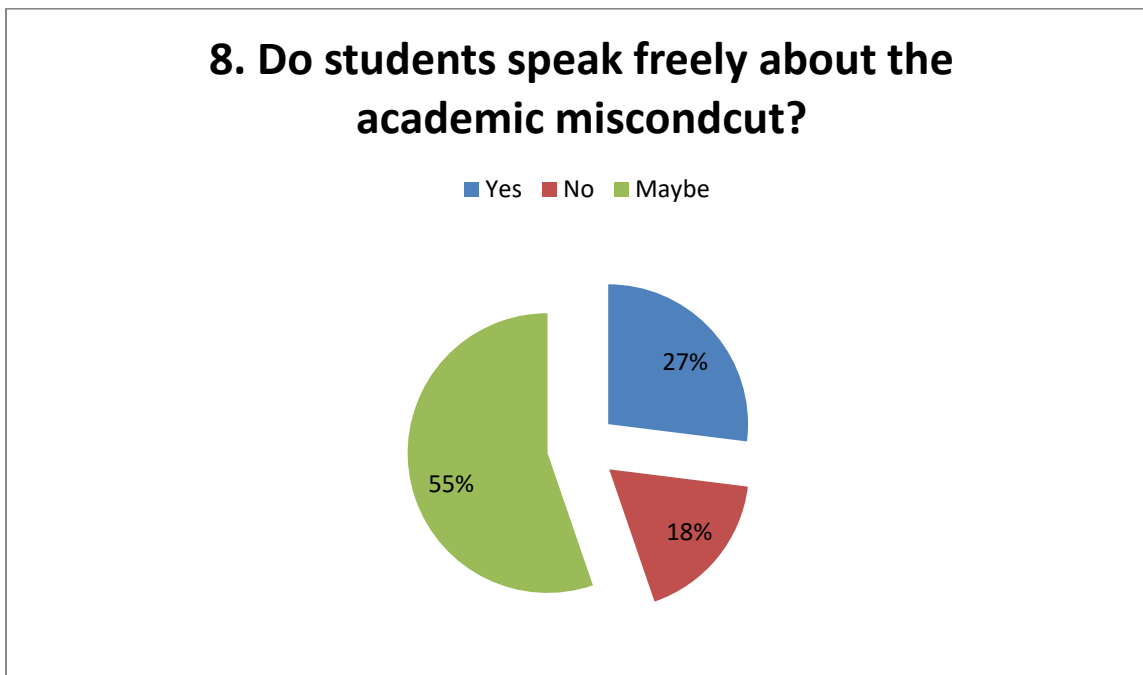


Figure 4

The pie chart above illustrates whether the students freely speak about cheating themselves. It shows that 55 percent of the students are not sure about the amount of discussion given to this matter. 27 percent is affirming that they do speak freely about it. On the other hand, only 18 percent says that they do not speak freely about this topic.

#### Teachers' Perspective:

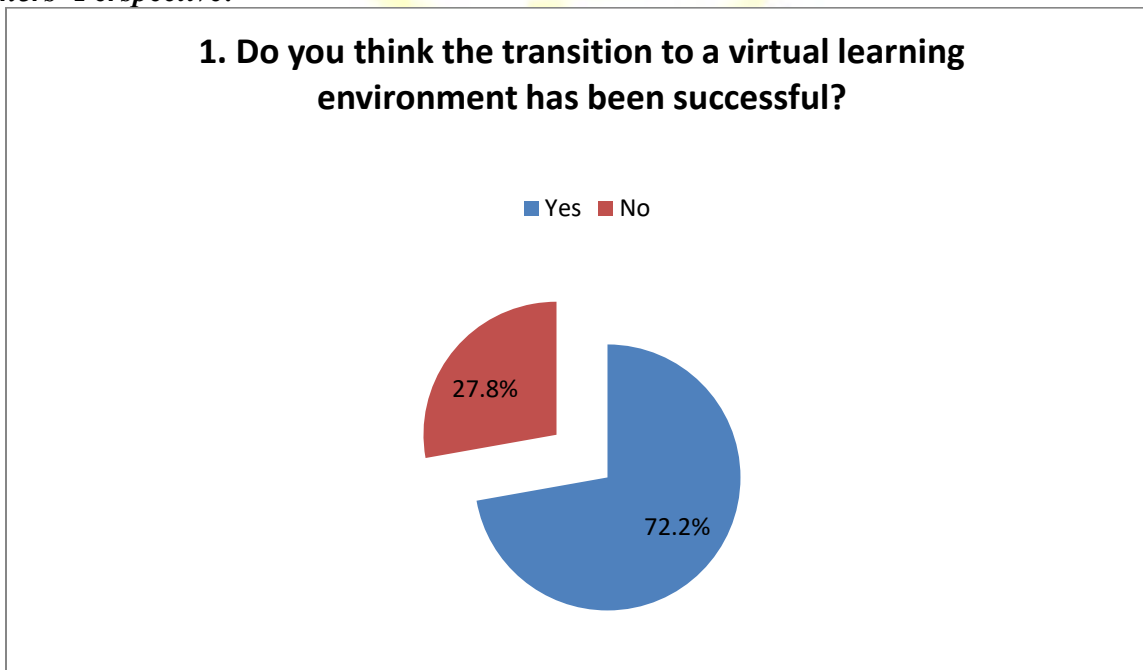


Figure 5



The above pie chart shows 72.2% of respondents think that moving to virtual learning was successful, while 27.8% believe it is not. According to respondents, there are many reasons behind the success of the virtual learning such as; the internet is present in every household and well-used. Consequently, the successful in the sense that the learning process was not stopped in spite of the pandemic. According to some respondents, students are doing their part in learning, practicing, reviewing and interacting with the instructors and their classmates. Also, they focus on their studies. The students and teachers adapted easily by effectively using the virtual learning features such as conference tool, assignment tool, discussion tool, etc. Furthermore, students become more independent in virtual learning because they are completing all the tasks assigned to them by themselves without peer pressure and interruption. The teaching learning process is simplified to a great extent as the need for repetition has been reduced. This is because of the fact that class recordings are available for the students. Although the transition met some resistance in the beginning, it is now successful and students prefer it. If the students have the desire to learn they should make extra effort by paying attention during the classes and contacting their instructors when needed.

On the other hand, some respondents consider that the transition to the virtual learning is unsuccessful because the instructors hardly can make sure if the students are actively listening to the lecture or has just left the device logged in to have a "Ghost attendance". Additionally, virtual learning is not suitable for practical course where practical skills should be learned.

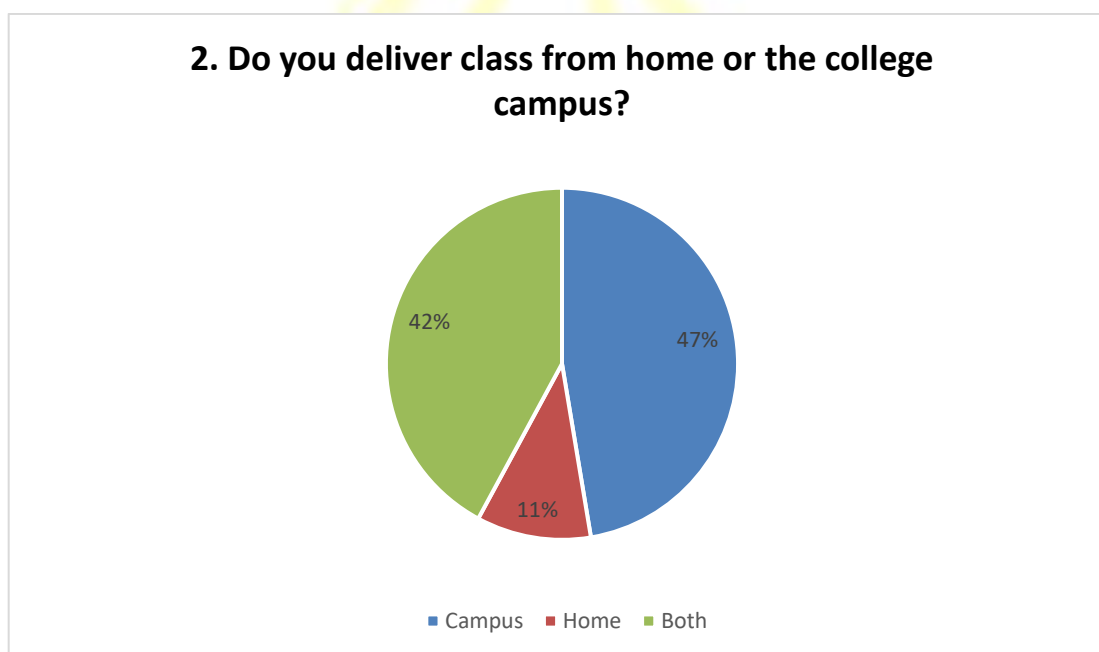


Figure 6

The above bar graph shows whether the classes are conducted from home, college or both. It clearly that 47% of the instructors are conducting their classes from the campus, followed by 42% of the respondents are taking their classes from both campus and home. Only, 11% take their classes from home.

### 3. Did teaching from home pose any special challenges? If yes, please describe the major challenges.

There are several difficulties appeared while teaching from home such as; internet connection which made it difficult to contact with the students and get them interested to attend the sessions.



Moreover, one the considerable challenge of teaching from home is being distracted by the family members. As well as balancing the commitment at home with the work duties. This will affect instructors' ability to follow up the progress of the students.

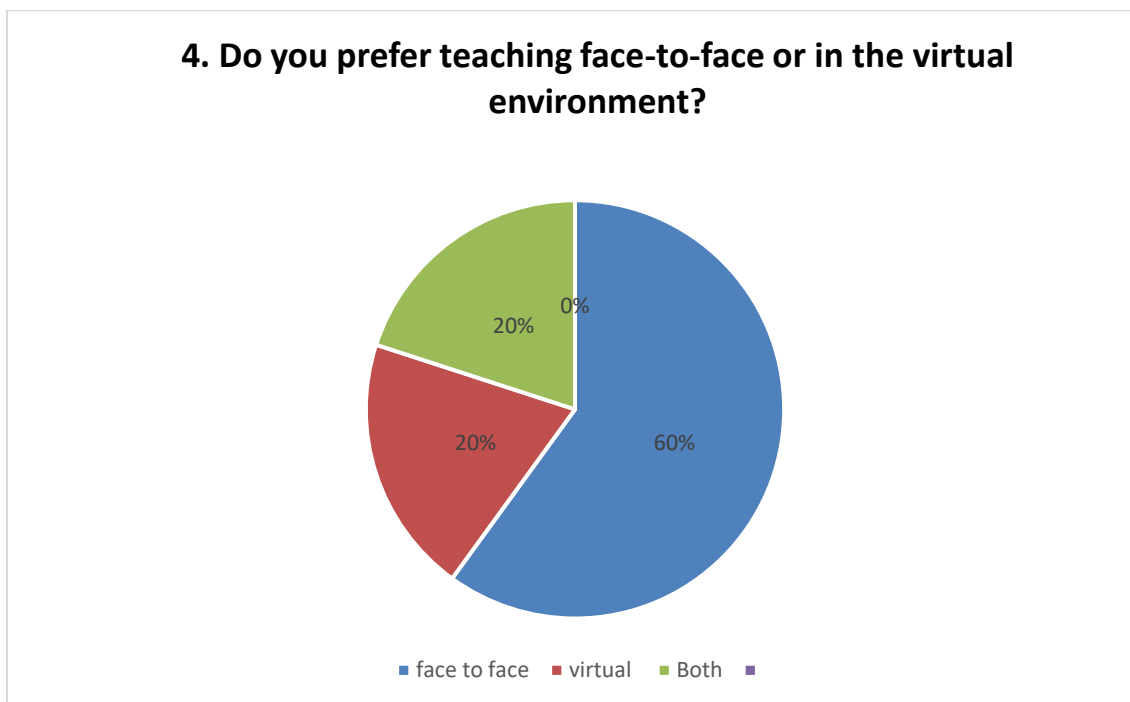


Figure 7

The above pie chart obviously illustrates that 60% of the respondents prefer face to face teaching. The main reasons behind this, is the difficulty of teaching practical courses through virtual classes because students are not gaining any hands-on experience. In addition, the students do not own or have an access to resources, equipment or programs necessary for their practical courses.

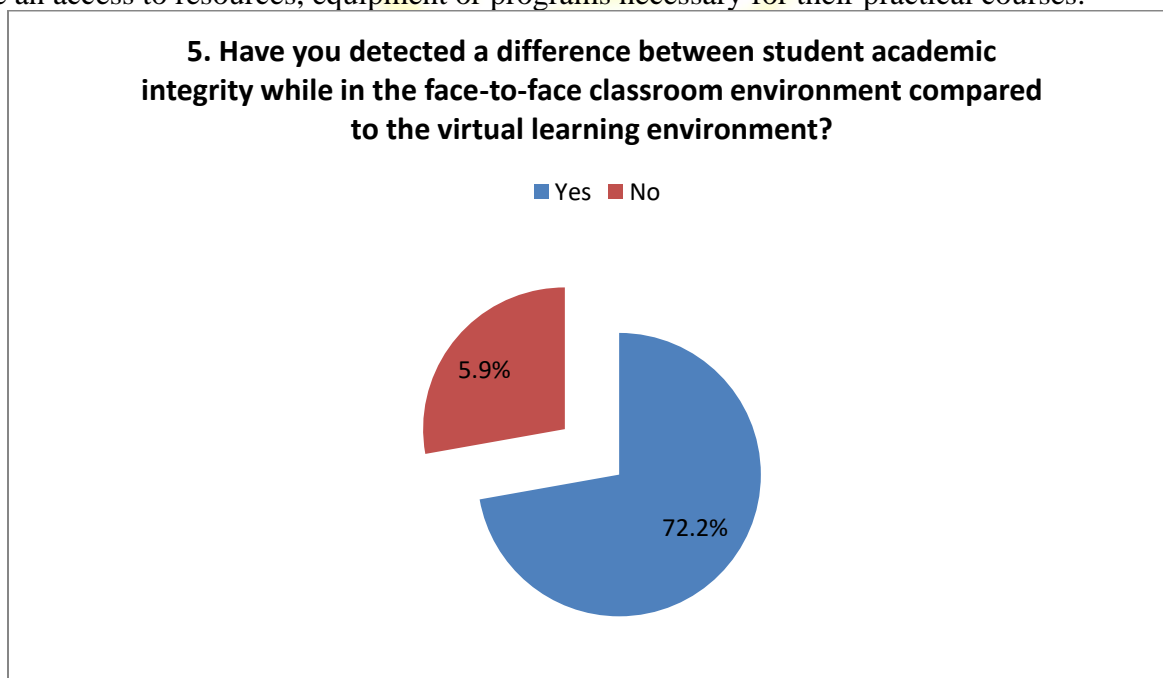


Figure 8





The above pie chart is showing whether instructors perceived any difference in students' academic integrity in traditional classes compared to the virtual learning environment. About 94.1% of the responses noticed the difference, while only 5.9% did not notice any variance.

**If yes, please describe the major differences.**

Respondents are claiming many major differences in online classes in comparison with the traditional classes including copying from the internet. However, in the face-to-face classes, students can hardly use the internet. Additionally, students are using all the help that they can get in online mode, especially in making assignments and doing exams. Respondents pointed out that there is an increase in online cheating because there is no effective monitoring ways.

Another major difference acknowledged by some respondents, is that they cannot recognize whether students understand or not especially in practical sessions. However, others are claiming that interactions, evaluations, attendance and assessments are the general differences. However, being in the classroom assures the instructors about the student's level and productivity. While in virtual learning, the instructors cannot make sure about the student's performance when answering written tasks or solving questions. Others said, evaluation and minimal supervision are the main challenges in virtual teaching. In addition, some claim that numbers of academic integrity violation cases have increased. Students get more freedom to choose whether to attend class or not and they get the freedom to go for an open book exam. On the other hand, students are more confident to participate in interactive activities than in face-to-face classroom environments. In face-to-face sessions some students are shy to participate while during virtual learning they seem active. Academic performance as per in the assessments of virtual learning is high compared to face-to-face learning.

**6. What strategies have you used to maintain academic integrity amongst your students?**

According to this study, we found out that instructors are using different techniques to maintain academic integrity in online classes such as turning on camera's, keeping reminding the students about the examination guidelines, policy and penalties and at the same time reviewing students' work step by step. Furthermore, the instructors are using plagiarism checker, Turnitin and giving pop quizzes or activities. Also, instructors compare students' answers to check whether they copied from each other. Others indicate that the individual set of activities per student is being prepared to minimize the chance of copying assignments, quizzes, or exams. Moreover, the questions are out in extra number and then shuffling the questions so each student gets a different set of questions which helps avoid cheating. Correspondingly, using new methods in teaching online that focus on the need to know the opinion and analysis, determine the position and resort to questions that indicate the level of understanding, perception and acceptance of students. Also, giving them critical and research integrated questions which they cannot plagiarize or discuss their written answers briefly.

**7. Which have been the most successful?**

Most respondents point out that using a camera and Turnitin are the most effective ways to achieve academic integrity within students. Similarly, instructors make every activity in the class as part of the classroom attendance and participation marks as well as discussing their written answers briefly. It is important to note that results of assignments, quizzes, and exams cannot make sure that the work has been honestly done by students themselves. However, others claim that success can only be achieved by students' morality.



### 8. Has your college taken special steps to ensure academic integrity is maintained?

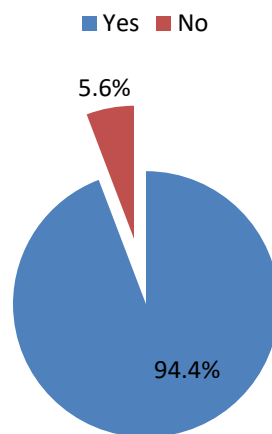


Figure 9

The above pie chart illustrates if the colleges and universities in the sultanate have taken the procedure to maintain academic integrity in online classes during the pandemic. About 94.4% of instructors declare that their colleges have taken special steps to ensure academic integrity among students. For instance, setting rules and assuring plagiarism policy. Besides, conducting workshops on how to use the Learning Management System used in the college. For some requirements, students are asked to submit in handwritten form, but even that cannot assure that the document has not been written by the student or with the help of his friend or any other person. Plus, increase students' self-reliance in completing the tasks assigned to them individually, monitor student performance using specialized applications and increase students' knowledge of using those applications. Furthermore, preparing more than one set/paper for each exam to avoid the chances of cheating. Moreover, depending upon the percentage of plagiarism where marks are reduced, or the assignment is returned for resubmission. Turnitin also, is a program that can be used to check for plagiarized work. Finally, instructors should make critical questions in the exams to prevent cheating.

#### Discussion:

The virtual learning during the pandemic has offered opportunity for the colleges and universities in Oman to continue the education as well as other benefits that were acknowledged by the students and lecturers alike. According to the students, they are comfortable studying from their home as this allows them to save the time they normally spend in getting ready and then going to the college as well as money. In addition, students are able to attend the lectures wherever they are and if they are not free at that time, they are able to listen to the lecture when they do have time as the lectures are recorded.

Despite these advantages, many challenges occurred in the new setting of learning online. According to the respondents, the internet issues are the main reason for the ineffectiveness of virtual learning. Students were forced to travel to a distance just to get a network's signal so they can do their exams or submit their assignments. This paper suggests that the Sultanate should pay more attention to the



infrastructure development. Other issues as per from the students' perspective, were regarding the comprehension of the lectures given. Many felt that it is difficult to understand in the virtual learning, especially when it comes to practical sessions. This is due to the fact that some students do not have the equipment or software needed for their classes for practical application. Other than that, the lecturers pointed out the academic integrity issue which was quite evident in the online learning as acknowledged by the instructor. The lectures highlighted several reasons for that including; access to wide information using the internet, accessing the lecture materials and getting help from other people. The lecturers were quite concerned whether the students actually understand the lectures because lack of understanding could lead the students to turn to these kinds of academic integrity violations.

Hence, as claimed by the respondents, to maintain academic integrity in the online learning, the lecturers took several approaches and strategies. In general, according to the instructors, the students are informed by the guidelines and policies of the academic integrity as well as the penalties that they will get if there is any violation. However, the students did not mention anything related to these policies in their answers. This is because the students do not take these policies regarding the academic integrity seriously. Despite the active reminder from lecturers as they are sending emails to the students with the guidelines, but they do not seem to read them to understand.

The analysis showed that the students use different ways to violate the academic integrity such as using the course materials, the internet and communicating with their friends through various social media applications as well as purchasing assignments. However, the instructors are using different measures to prevent and detect these violations. Most of the colleges and universities in the Sultanate are using plagiarism detection programs such Turnitin to check whether the students had copied the assignment from any external resources. Furthermore, it is required for the students to open the cameras and microphones during the exam to prevent them from cheating either from their handouts or from the internet. In addition, the lecturers are preparing critical questions for the exams where the students cannot copy the answers from the handouts. It is important to mention that the Ministry of Higher Education, Research and Innovation is taking extreme measures for those who offer services of assignment, making and selling for the colleges' and university students as it is mentioned in the statement published by the ministry on April 2021. It is justified by emphasizing that this is an illegal behavior as it leads to the loss of the research's credibility. Moreover, the students will be highly dependent on others and this will reflect negatively on the community and the country.

One more approach to be taken by colleges and universities is to use more advanced technologies and programs to reduce academic misconduct. For example, use face recognition technologies or fingerprint identification to ensure that the students are doing the exams themselves without seeking any help from others. In addition, the colleges and universities could develop the IT department to apply new technological ways to increase academic integrity, for instance, allowing only specified IP address of the students to get access for the exam and restrict them from entering any online websites.

### **Conclusion:**

Maintaining academic integrity in virtual learning during the pandemic COVID-19 is a challenge for almost all of the colleges and universities in Oman. This research has proven that the academic integrity violation increased since the switch to the online learning. The main reason behind this increase is the ease of getting information from the course materials, the internet and the help of other people. This is because the ineffective ways of monitoring the students as they are doing their



various assessments. In addition to that, students have low self-confidence and lack of comprehension as some students do not have strong network signals and others do not seem to understand from online classes. However, the colleges and universities have been trying to minimize the academic integrity violations by adopting new policies and strict rules. Importantly, there should be more effort done in this regard from both the higher education institutions and the faculty members. For instance, the instructors must find new ways of preparing and conducting assessments in virtual learning. Also, the use of new technologies in monitoring the students during the exams as well as one to one evaluation by the instructors to assess the students' knowledge and abilities. These strategies can help in minimizing the academic integrity violations to the least and would allow this new way of learning to continue even after the pandemic.

### References:

1. Academic Integrity in the age of online learning. (2020). Wiley. Retrieved from <http://read.uberflip.com/i/1272071-academic-integrity-in-the-age-of-online-learning/1?>
2. Cole, M & Swartz, L. (2013). Understanding academic integrity in the online learning environment: a survey of graduate and undergraduate business students. ASBBS Annual Conference: Las Vegas. Vol. 20, No.1. Retrieved from [http://asbbs.org/files/ASBBS2013/PDF/C/Cole\\_Swartz\(738-746\).pdf](http://asbbs.org/files/ASBBS2013/PDF/C/Cole_Swartz(738-746).pdf)
3. Eaton, S. (2020). Academic integrity during COVID-19: reflection from the University of Calgary. *International studies in Educational Administration*. Vol. 48. No. 1. pp. 80-85. Retrieved from <https://prism.ucalgary.ca/bitstream/handle/1880/112293/Eaton%20ISEA%202020%2048%281%29.pdf?sequence=1&isAllowed=y>
4. Hapke, A. (2017). Online learning integrity approaches: current practices and future solutions. *Online Learning*. Vol 21, no.1. Retrieved from [https://pdfs.semanticscholar.org/6211/c3145a2630c683b3afca16fa2a925b90f970.pdf?\\_ga=2.229472411.667361122.1621312577-904356221.1621312577](https://pdfs.semanticscholar.org/6211/c3145a2630c683b3afca16fa2a925b90f970.pdf?_ga=2.229472411.667361122.1621312577-904356221.1621312577)
5. Heberling, M. (2002). Maintaining academic integrity in online education. *Online Journal of Distance learning Administrations*. Vol. V, no. 1. Retrieved from <https://www.westga.edu/~distance/ojdla/spring51/heberling51.pdf>
6. [https://www.researchgate.net/publication/260969851\\_Academic\\_integrity\\_Online\\_classes\\_compared\\_to\\_face-to-face\\_classes/link/00b49532c4c5021bd8000000/download](https://www.researchgate.net/publication/260969851_Academic_integrity_Online_classes_compared_to_face-to-face_classes/link/00b49532c4c5021bd8000000/download)
7. *International Journal of Information Technology and Language studies*. Vol.4, no. 2. Pp.44-56. Retrieved from <https://journals.sfu.ca/ijitls/index.php/ijitls/article/view/135>
8. Jones, L. (2011). Academic integrity and academic dishonesty: A handbook about cheating and plagiarism. Florida Institute of Technology. Melbourne, Florida. Retrieved from <https://repository.lib.fit.edu/bitstream/handle/11141/2601/JonesAcademicIntegrity.pdf?sequence=1&isAllowed=y>
9. McNabb, L & Olmstead, A. (2009). Communities of integrity in online courses: faculty member beliefs and strategies. *MERLOT Journal of Online Learning and Teaching*. Vol. 5. No. 2. Retrieved from [https://jolt.merlot.org/vol5no2/mcnabb\\_0609.pdf](https://jolt.merlot.org/vol5no2/mcnabb_0609.pdf)
10. Miller, A & Young-Jones, A. (2013). Academic integrity: online classes compared to face to face classes. Missouri State University, US: ResearchGate. Retrieved from
11. Slimi, Z. (2020). Online learning and teaching during COVID-19: A case study from Oman.
12. Stoesz, B, Eaton, S, Miron, J & Thacker, E. (2019). Academic integrity and contract cheating policy analysis of colleges in Ontario, Canada. *International Journal for Educational Integrity*. Vol.15. no. 4. Retrieved from [https://www.researchgate.net/publication/335455183\\_Academic\\_integrity\\_and\\_contract\\_cheating\\_policy\\_analysis\\_of\\_colleges\\_in\\_Ontario\\_Canada/link/5fc4822ca6fdcc6cc6846aa0/download](https://www.researchgate.net/publication/335455183_Academic_integrity_and_contract_cheating_policy_analysis_of_colleges_in_Ontario_Canada/link/5fc4822ca6fdcc6cc6846aa0/download)