

## **ODL, E-Assessment and Challenges: Investigating Academic Dishonesty among Pre-university Students during Covid-19 pandemic**

G.Nagamany a/p Govindan, Khairunnisa Othman, Mohd Shahrudin Mohmud & Muhammad Aiman Abdul Halim  
Universiti Teknologi MARA

*Corresponding Author Email: nagamany856@uitm.edu.my*

### **ABSTRACT**

The objective of this study is to investigate the awareness of academic dishonesty among pre-university students in Malaysia and to suggest ways in which institutions can prevent violation of academic honesty in online distance learning (ODL) assessments implemented during the covid 19 pandemic. This study is deemed valuable since academic dishonesty is observed to be on the rise since the implementation of ODL. To investigate this phenomenon, the method adopted is a cross-sectional descriptive study with a survey questionnaire to elicit pre-university students' views on the topic of academic dishonesty. The findings of the study indicates that the students are aware of what entails academic dishonesty and the types of dishonest acts performed during ODL assessments. The conclusion of this study based on the findings, points to the responsibility of preventing academic dishonesty falls on both the institutions and the students. The recommendations offered based on the findings of this study include suggestions to address the shortcomings of the existing assessment regulations to encompass online distance learning assessments in view of the new methods of dishonest acts and to design types of assessment tasks that would significantly reduce or eliminate the opportunities for students to commit academic dishonesty.

Keywords: e-assessment; academic dishonesty awareness; pre-university students; covid-19 pandemic; institutional responsibility

## INTRODUCTION

Covid 19 pandemic overturned the ways in which every aspect of one's life is planned, organised, and managed. The sudden demand for effective alternative methods of executing and steering essential sectors during the pandemic placed a mega challenge onto the management and governance divisions of various departments and units. The education sector whose core components of communication, instruction and management up to the time the pandemic began were performed through person-to-person contact, witnessed a drastic change in the way the sector was managed (Ivan & Cazan, 2023; Roslan Abdul Wahab, 2022).

This study was mooted by the accelerated shift from face-to-face to online teaching and learning mode, due to the covid-19 pandemic and the ensuing challenges in executing teaching, learning and assessment activities and tasks. Switching assessment methods from paper and pencil to online platforms posed numerous challenges, one of which is the high incidence of academic dishonesty (Subin, 2021; Sirdeshmukh, 2021). In a forced distance learning situation such as the pandemic, limitations were set to the types of tools which can be used for teaching, learning and assessment which include assignments, project work, presentation or even the final examination. The pandemic was seen as a unique situation where the tools used for teaching and learning were limited to the computer and internet connectivity which offered vast amounts of materials and ideas for teaching and learning. As such, the use of technology and technological tools for education was maximized since they offered connectivity and accessibility that suited the crisis at that moment. Significantly, the computer as well as other electronic devices with internet connection have been known to facilitate academic dishonesty (Chang, Chen, Huang, & Chou, 2015) cited in Polona Šprajc (2017), and the choice in this situation, whether to treat the academic duties honestly or otherwise, has mainly been left to the students.

Numerous studies have been conducted on the design of materials and amendments to be made to the pre- covid syllabus to suit the ODL mode (Simamora, 2020). Studies have also been conducted extensively on the problems faced by both educators and students due to the limitations set by the crisis such as movement control, lack of facilities and the internet connectivity issues (Olasile Babatunde Adedoyin, Emrah Soykan, 2020; Selvanathan, 2020; Radha et al, 2020). A wealth of insights has also been presented for this study on misconducts among students during assessments including online assessments. (Syezreen Dalina Rusdi et al., 2019; Nor Lailatul Azilah Hamdzah et al., 2020; Aishah Musa & Junaida Ismail, 2021; Metal Amzalag et al., 2021; Oleksii Nalyvaiko, 2022). The objective of this study, therefore, is to investigate the students' awareness of academic dishonesty which was prevalent during the covid-19 pandemic. It is conducted with the aim to obtain insights into the extent to which pre- university students are aware of academic dishonesty, the role of the institution in informing the students on the subject of academic dishonesty and the actions that are deemed as dishonest by students.

## LITERATURE REVIEW

**E-assessment:** The purpose of assessment in general is to provide insights into the efficacy of daily-decisions in matters pertaining to pedagogical approaches, among others and also to “diagnose student strengths and weaknesses related to classroom instruction” asserts Tosuncuoglu (2018). Assessment also provides immediate feedback for teachers to shape their teaching practices according to the learning styles of their students (Haladyna, 2002) cited in

Kocdar (2018). Tahira Bibi & Amtul Hafeez (2018) stated that the benefits of distance learning emphasized, are cost-effectiveness, quality of instruction, flexible and self-directed.

With the onset of Covid-19 pandemic, the idea of assessment experienced a hastened shift from physical assessment modes to online or e-assessment which according to Allan (2020) cited in Reedy et al. (2021) is a “high-stakes summative assessment events, mediated by digital technologies, often taking place in a defined place or time and under secure conditions (e.g. invigilation, restrictions on access to course materials, notes or communication)”. The shift benefitted the institutions and students alike in that it offered “temporal and spatial flexibility, cost efficiency and ease of administrative obligations which suited the movement control order implemented during the crisis (Reedy et al., 2021). Academics have identified many benefits and opportunities of online education during the implementation of ODL, a platform that can replace the usual face-to-face traditional classrooms. Suhaida et al. (2021) further added that to ensure effective learning to be achieved in the best possible way, online teaching and learning must continue even after the pandemic has ended.

**Academic Dishonesty and Online Distance Learning:** Academic honesty is a component of academic integrity. Guerrero-Dib, Portales, and Heredia-Escorza (2020) defined academic integrity as “much more than avoiding dishonest practices such as copying during exams, plagiarizing or contract cheating”. This definition draws into its folds by connecting other relevant aspects of education such as learning, by being committed to the learning and completing the related tasks using “genuine effort and good skills” for a “good purpose” that is learning. Hence, academic dishonesty can be perceived as actions committed to cheat for the sole purpose of obtaining favourable outcome in examinations and other types of assessments simultaneously disregarding the value of learning, effort and skills. García-Villegas et al., (2016) cited in Guerrero-Dib, Portales, and Heredia-Escorza (2020) suggested that academic dishonesty is an indicator of cultural flaw that regards violation of rules as a common practice and integrity is not as valuable as it should be. Sendir & Maxwell (2020) cited in McDonnell and Kewarin Tantong (2022) view academic dishonesty as behaviours “intended to falsely represent one’s academic work as original, and can take many forms, including deception, unauthorized resources, collusion and plagiarism”.

Online distance learning (ODL) is a provision of flexible learning opportunities where students can access formal education from home or wherever they are. According to Husna Hafiza & Roslina (2021), there are three characteristics of ODL: 1) the students are mostly in separate locations; 2) the process involves instructions assisted by two-way interaction between the instructors and students; 3) technology is used to assist learning and communication. The flexibility ODL offers has allowed students to learn at their own pace and in their own time. The Covid-19 pandemic has made ODL considerably popular, and in fact, was the only option for formal learning during the Covid-19 pandemic. which allows for this study to be embarked on to address the prevailing issues pertaining to the abuse of technological tools that facilitate academic activities. The intention is to offer insights as well as remedy as preparation to address such abuses if and when they occur during online assessments post covid 19 pandemic contexts.

Though the benefits of using technological tools to maintain the continuity of teaching learning are undeniable, one of its main downsides, which is academic dishonesty is well worth acknowledging. Syezreen et al. (2019) provided 3 broad categories of academic cheating namely, plagiarism, test cheating and assignment cheating. Krou et al. (2020) cited in Amzalag

---

et al. (2021) categorized academic dishonesty acts into plagiarism where materials are borrowed without acknowledging the author, hiring of third party to complete the task, among others, and cheating, which includes obtaining answers from a fellow student who has completed the test, “collaborating with friends” to complete an assignment without being assigned as a collaborative work, obtaining answers from friends and using reference materials during an exam. It can now be concluded that, the pandemic and its limitations, together with the use of technological tools have created contexts that allow for unbridled opportunities to not only commit plagiarism which was restricted to “materials borrowed without acknowledging the author” (Krou et al., 2020), but also to devise and execute dishonest strategies in addressing online assessment tasks.

Technology is needed in order to make ODL a platform for formal learning. It has the potential to revolutionize ODL by making it more accessible, flexible and interactive. As such, it is an important tool to deliver such high-quality education to learners around the world. Abid et al. (2022) believe that digital learning tools and technology provide an immediate learning environment and faster evaluation where traditional classrooms cannot offer. Basic devices like personal desktops, laptops, tablets, and even smartphones can be used for online education. Students can access virtual learning materials, participate in online discussions as well as communicate with their classmates and instructors. These features of convenience that online distance learning offer to students are the exact factors that facilitate academic dishonesty. Scanlon and Neumann (2002) cited in Cheak (2013), found that students who normally copy their friends’ work are now using a different tool which is the internet. The ease of use and their skills at searching, adopting, and adapting materials for their learning are also the enabler of academic dishonesty, which is further enhanced by the confident ownership to the devices and internet connectivity. Although this study (Scanlon and Neuman, 2002) was conducted long before the pandemic, the use of technological devices to commit academic dishonesty existed then and the view is still relevant to the present day, albeit the types of devices used and the dishonest strategies used in e-assessment are far more sophisticated than before.

Slade (2020) is of the view that the problem of academic dishonesty is aggravated with the accelerated shift to e-learning that did not allow time for “risk assessment of academic integrity breaches”. She regards the decline in academic honesty as a key risk due to the “unprecedented academic integrity discourse shift” as face-to-face invigilated examinations were now invigilated online or transitioned to non-invigilated assessments. Although adopting e-assessment during the pandemic is in line with the standard operating procedure where physical contact is to be avoided and the use of electronic devices facilitate academic activities, there have been studies that indicated electronic devices as tools that enable academic dishonesty (Bartley, 2005; Rowe, 2004; Gathuri, Luvanda, Matende & Kamundi, 2014 cited in Kocdar & kadadeniz, 2018). Lina Elsalem et al. (2021) revealed that, around 40% of the participants of her study resorted to completing their assessment tasks using every available external help since the assessments were taken remotely. This indicates that the devices used with the readily available online materials are tempting enough for students to resort to dishonest acts in completing their assessment tasks be it tests, examinations or assignments. While the benefits of e-assessment, especially during a crisis like the covid-19 pandemic are indisputable, academic dishonesty being one of the main the challenges it posed to academicians and administrators require serious and immediate response.

Mukasa et al.’s (2023), findings among others highlighted the rampant occurrence of academic dishonesty among students in institutions of higher learning. According to the

researchers, university students are highly inclined towards dishonest activities in their academic endeavours due to a lack of awareness on the policies that govern academic integrity. Although Mukasa et al.'s study did not specifically focus on ODL situation, the findings are relevant considering the objectives of the study were on the factors that drive dishonest acts among university students. Blau et al. (2021) cited in Alguacil et al. (2023) opined that the rapid progress in digital technology and its use in distant learning situations has led to students cheating using technologically innovative tools. They further added that for the students, the effect and consequences of cheating is somewhat lessened with the use of these tools. It has been revealed in a study by McDonnell & Tantong (2023) the definition of academic dishonesty has been made ambiguous due to the nature of online learning and that students are redefining cheating. Davis et al., (2009) cited in Riad (2023) opined that academic dishonesty is caused by the students' "unpreparedness and procrastination" and Riad further elaborates that cheating is a "behavioural issue and a moral dilemma" which she affirms with Bushway & Nash's (1977) view that students cheat because they do not know why it is wrong.

Many other studies have found that with the rise of cases of academic dishonesty within the context of covid 19 pandemic, many institutions of higher learning acknowledge the seriousness of this phenomenon (Mukasa et al., 2023), despite the total dependency on technological devices for learning. The institutions are embarking on measures to curtail it.

**Institutional and Students' Commitment to Academic Honesty:** The definition of academic integrity "as a commitment to five fundamental values which are honesty, trust, fairness, respect and responsibility" (The international Center for Academic Integrity, 2014) places heavy emphasis on academic institutions as the dominant party in ensuring the preservation of academic integrity. The organization further elaborates that honesty is essential for the realization of the other four values within the educational contexts while dishonesty "tarnishes the reputation of the institution" and devalues the degrees it awards. Echoing the stance of The International Centre for Academic Integrity is the opinion of Hughes & McCabe (2006, p. 59) cited in Eaton and Hughes (2022) that "higher education plays an essential role in democratic society" and that faculty and administrators need to recommit "to provid[ing] our students with a high-quality education, to develop moral and engaged citizens, and to uphold the highest standards of integrity" (p. 63). Additionally, Amzalag et al. (2021) too is of a similar opinion where they suggested that inculcating ethical and moral values which together are known as "academic integrity" and "appropriate academic behavior" is the duty of educational and higher education systems. The implication of these views is that the responsibility of instilling, and maintaining academic integrity are placed on educational institutions. While institutions of higher learning are believed to shoulder the responsibility of inculcating values of academic integrity and steering the students to equally uphold their part of the responsibility in maintaining academic integrity, it is essential to examine the students' stance in this issue.

Dendir & Maxwell (2020), opined that the choice to commit acts of dishonesty is based on students' personal values influenced by the elements in their surrounding and factors that facilitate or hinder such behaviours. These factors point to the students' choice in the manner in which they act and perceive their academic achievement. Be it the influence of "peers or society", "obstacles or punishments" and "incentive, opportunity and rationalization" (Dendir & Maxwell, 2020), if the students uphold the integrity of the self and mind, the violation of academic integrity will not occur.

---

## **METHODOLOGY**

The methodology for this research is a cross-sectional descriptive study using a survey questionnaire investigate the awareness of academic dishonesty among pre-university students in Malaysia. The questionnaire was divided into 6 sections namely, Respondents of the survey are Pre-U students who underwent their course of study solely via online distance learning mode. The sample comprises of 99 students. Pre-university students were selected based on the assumption that being fresh out of school, academic integrity may be an idea that has not been clearly grasped by them prior to enrolling in a pre-university programme particularly in the covid-19 situation. The pandemic as well as the unclear understanding of academic dishonesty, had placed the pre-university students as suitable subjects of study. The survey questionnaire consists of six sections that with the first section focusing on participants' demographic information,

## **FINDINGS AND DISCUSSION**

This study focuses mainly on the data gathered in 2 sections which are ..... The questions elicit responses related to the respondents' awareness of academic dishonesty particularly the meaning of academic dishonesty and academic integrity as well as the role of the institution in inculcating the values of these among the students. The second section examined what is deemed as acts of academic dishonesty by the students.

To ascertain the reliability of the instrument of data collection, Cronbach's alpha was used. It measures the extent to which the items of survey as a set closely relate to one another as a construct. The reliability measure of this section consisting of four questions from the survey indicates 0.775 which is a good score. Sekaran & Bougie (2013) suggest that Cronbach's alpha of more than 0.7 is accepted as good, 0.8 and above is better, and 0.9 and above is excellent.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.775	4

The first section of the questionnaire aimed to determine the level of students' awareness towards academic dishonesty and what they consider as acts of dishonesty in academic assessments. The participants were presented with three questions on awareness for which they were required to respond with either "yes" or "no" and a list of twelve actions which they were required to identify each action, whether it is an instance of academic dishonesty based on their current knowledge and perspective. The succeeding graphs clearly indicate the students' awareness and outline the comprehensive list of the aforementioned twelve actions, alongside the responses provided by the participants.

Figure 1 surmises the findings of 3 key questions pertaining to students' awareness of academic dishonesty, academic integrity and if the institution they have enrolled at have in place measures to deal with academic dishonesty. A total of 98 students agreed that they know the meaning of academic dishonesty followed by 97 students who know the meaning of academic integrity. These two findings indicate that the students are aware of the two key concepts being investigated in this study which are academic dishonesty and academic integrity. All the participants of the survey are aware that the institutions that they study at have policies and procedures to deal with dishonest acts during ODL assessments.

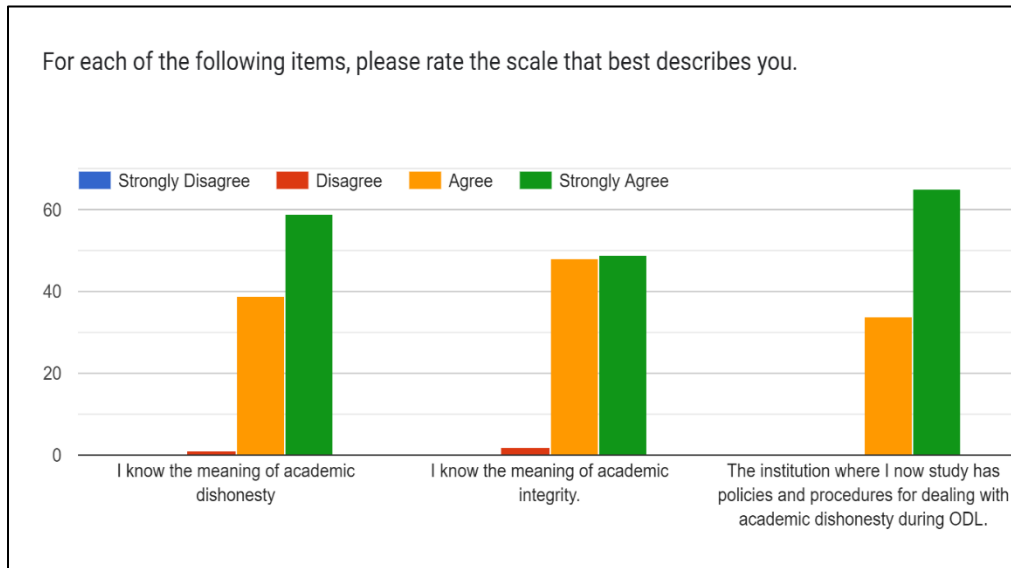


Figure 1: Awareness of Academic Dishonesty, Academic Integrity and the institutional policies pertaining to Academic Dishonesty

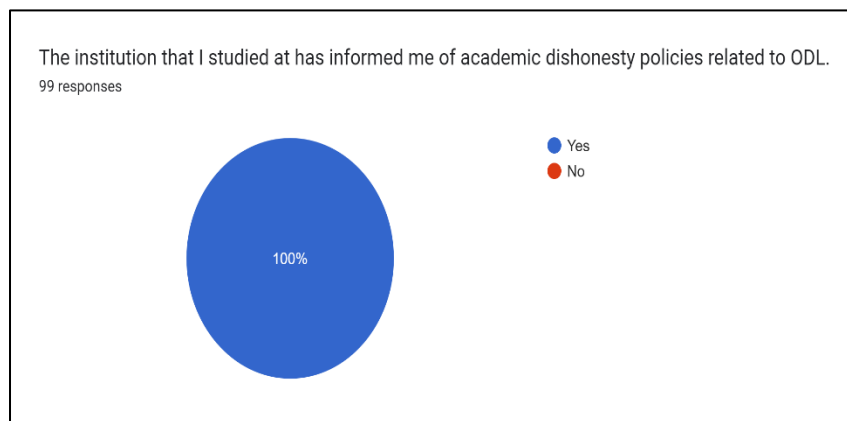


Figure 2: Institutions informing Students about Academic Dishonesty Policies

Figure 2 indicates that all the participants admit that they have been informed by their respective institutions regarding the policies pertaining to academic dishonesty. This clearly posits the respective institutions in a positive light with regards to putting in place preventive measures and to inform the students of these measures to curb the students from committing acts that are detrimental to their academic achievement.

The following question was posed to elicit the participants' response to what they perceive as acts of academic dishonesty during E-assessments administered during the Covid-19 pandemic. We provided 12 options for the participants to choose from. They were allowed to provide multiple responses to this question.

Survey question: *I consider the following as acts of academic dishonesty*

Table 1: Academic Dishonesty Acts as perceived by Students

<i>Responses</i>		Yes	No
		%	
1.	Copying material verbatim (word for word).	93.9	6.1
2.	Copying portions of another person’s work.	91.9	
3.	Replacing certain words to try to bypass plagiarism detectors.	54.5	
4.	Paraphrasing material, in my own words, from multiple sources without giving credits.	71.7	
5.	Copy and pasting material from multiple sources.	80.8	
6.	Citing sources incorrectly or fabricating sources.	69.7	
7.	Using gadgets and devices to communicate with friends for answers	85.9	
8.	Distributing and dividing assessment questions/tasks to be answered and shared in a group	66.7	
9.	Copying from forums and discussions carried out and recorded on ODL platforms	54.5	
10.	Copying from lecture notes from lecturers	57.6	
11.	Paying online services or someone else to complete an assignment for you.	86.9	
12.	Using software to solve problems-based questions/calculations.	70.7	

Drawing from the results obtained for the question pertaining to acts that are deemed as dishonest, it can be inferred that the surveyed students possessed high level of conviction regarding specific behaviours constituting academic dishonesty. The results indicate that they were unequivocally certain that verbatim copying of materials (94.34%), copying fragments of another individual's work (94.34%), and utilizing electronic devices to obtain answers by communicating with peers (92.45%) constituted violation of academic integrity, as evidenced by the fact that these three practices registered a percentage of over 90%.

However, it is interesting to note that students exhibited uncertainty regarding the classification of four other behaviours as dishonest acts, as revealed by the mixed responses. These actions include: replacing specific words to evade plagiarism detectors (54.5%), collaborating with peers to complete and share assessment tasks (85.9%), replicating content from forums and discussions held on open and distance learning (ODL) platforms (54.5%), and reproducing content from lecture notes provided by instructors (57.6%). Their uncertainty in these instances could lead them to commit the act, thus affecting their achievement if they are found out or presenting unrealistic evidence of their true ability if they were not. Notably, the repercussions of either consequence would be grave.

### RECOMMENDATIONS AND CONCLUSION

Based on the findings of this study, it is clear that the responsibility of upholding academic integrity of an institution is equally distributed between the institution and the students. The institutions through their assessment policies have made their position clear concerning acts that are generally deemed as academic dishonesty. Existing regulations may not include online assessment modes, a situation which presents the opportunity for students to plead ignorance when they are caught committing the act. The unavailability of a list of specific acts of



---

dishonesty can be reason enough for one to act dishonestly during online assessments. This is evident through the students' responses which revealed that they are still not quite certain about specific acts that are categorized as acts of dishonesty. Hence, it is essential to design and construct a set of assessment rules and regulations to curb acts of dishonesty during online assessments.

Furthermore, an important question arises out of the participants' selection of some other actions that are deemed as dishonest. The percentages of selection, though small, are equally noteworthy and should be pondered upon. Is 6.1% [copying material verbatim (word for word)] a figure that is negligible in matters concerning academic dishonesty and preservation of academic integrity? What about 20.3% of participants who think that citing a source incorrectly is not a dishonest act? These two questions, bring to light the importance of constructing rules and regulations based on the type of assessment and the extent to which a student is allowed to refer to external sources and to emphasise on accurate citation format. For paper and pen type of assessments that solely evaluate students' understanding of concepts and application of these concepts, there should be zero allowance and tolerance for the use of external materials. In this aspect, it is essential that institutions fine-tune their assessment policies with examples of acts that are categorized as violation of academic integrity. This would be helpful for the students when they are faced with a situation that offers them the opportunity to seek external assistance in completing their assessment tasks or e-examinations from making choices that would prove to be detrimental to their academic achievement. With the specifics in place, the choice is left to the students to make; to cheat or not to cheat. The designation of assessment tasks, the administration of these tasks and the expected responses from the students, their specific requirements as well as the consequences of violating these, should be clearly communicated verbally and in writing.

Besides, with the pandemic having now been declared as an endemic and with the number of covid cases rising from time to time many institutions are opting to operate via hybrid or online modes. Hence, recreating assessment and examination rules and regulations by specifying acts of academic dishonesty and refining existing regulations encompassing online assessments and paper and pen type of examinations should be made as long-term measures of readiness in addressing potential violation of academic integrity.

Measures to preserve the integrity of human thoughts and mind through academic honesty should be undertaken despite the rapid influence of and dependency on technology in all aspects of life today. Institutions of higher learning should be the place where this aspect of human dignity is elevated and preserved. One way of establishing and achieving this is by curbing the abuse of technology and enhancing the students' ability to learn, retain and reproduce the knowledge and skills they acquired as students. Technology should be used only as a tool of learning and not as the brain to complete assessment tasks. If rules and regulations and constant reminders do not curb the violation of academic integrity among students, it is recommended that student-empowerment workshops are conducted to instil a sense of pride in their own abilities and to value the integrity of their mind and thoughts. The students should be made to be aware of the unique nature of individuals, diverse but united as a student community for whom the preservation of the integrity of the human mind, thoughts and voice would see the creation of a collective voice of integrity among the youth. This being an idea borrowed from Nalyvaiko (2022), who suggested that students should be made aware of both the "academically ethical and unethical behaviours", would help institutions of higher learning to create the space for a student's unique voice.

Due to the wide spread of various educational programs, a modern student must strive to create his unique "voice" in academic circles, therefore the formation of relevant ideas about academic culture and the manifestation of its integrity is one of the main tasks of education that wants to prepare a real creator, not just a cog in the system. (Nalyvaiko, 2022)

This paper concludes with a call for proactive measures, for all post-secondary institutions, to display greater commitment to academic integrity, including stepping up efforts to educate faculty and students as well as to embrace innovation in assessment design and invigilation practices and most of all to reconstruct, expand and implement assessment rules and regulations in-line with the changing modes of teaching, learning and assessment. We also propose the introduction of measures that will help to deter students from hiring contract cheating services which are widely available on the internet and are easily accessible to them. Failing to curb this dishonest act would enable such violation of integrity to be extended from learning environment to the workplace.

**\*CORRESPONDING AUTHOR**

Puan G.Nagamany A/P Govindan

Centre of Foundation Studies, Universiti Teknologi MARA, Cawangan Selangor, Kampus Dengkil, 43800 Dengkil, Selangor

nagamany856@uitm.edu.my

**ACKNOWLEDGMENT**

The authors would like to thank the Faculty of Education, UiTM Cawangan Selangor, Kampus Puncak Alam for the funding and support for this study [(GERAN DALAMAN “RAKAN EDU” FAKULTI PENDIDIKAN 2021- 100-FP(PT.37/8) dated 26<sup>th</sup> July 2021].

**ETHICS**

This study has been approved by the Research Ethics Committee via approval letter REC/06/2022 (ST/MR/103) dated 1<sup>st</sup> June 2022

---

**REFERENCES**

- Abid et al. (2022) Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers* Volume 3, 2022, Pages 275-285.  
<https://doi.org/10.1016/j.susoc.2022.05.004>
- Aishah Musa & Junaida Ismail. (2021) Academic Dishonesty: A Cause for Concern? *Journal of Administrative Science* Vol.18, Issue 1, 2021, pp. 334 – 342. <http://jas.uitm.edu.my>
- Alguacil et al (2023) Academic dishonesty and monitoring in online exams: a randomized field experiment. *Journal of Computing in Higher Education*.  
<https://doi.org/10.1007/s12528-023-09378-x>
- Cheak, A et al., (2013) Internet Plagiarism: University Students' Perspectives. *Conference Paper - International Research Conference 2013*, Pearl International, Kuala Lumpur, 26-27 September 2013
- Dendir, S., & Maxwell, R. S. (2020). Cheating in online courses: Evidence from online proctoring. *Computers in Human Behavior Reports*, 2, 1–10.
- Eaton and Hughes (2022) (eds.), *Academic Integrity in Canada, Ethics and Integrity in Educational Contexts 1*, [https://doi.org/10.1007/978-3-030-83255-1\\_3](https://doi.org/10.1007/978-3-030-83255-1_3)
- Eaton and Hughes. (2022) *Academic Integrity in Canada An Enduring and Essential Challenge. Ethics and Integrity in Educational Contexts Volume 1*
- Eshun et al., (2023) Personality Traits and Levels of Self-Efficacy as Predictors of Academic Dishonesty among Higher Education Students in Ghana. *Psychology*, 14, 13-34  
<https://www.scirp.org/journal/psych>
- Fishman. (Ed) (2012) *The Fundamental Values of Academic Integrity Second Edition*. International Center for Academic Integrity. Clemson University in South Carolina.
- Guerrero-Dib, J.G., Portales, L. & Heredia-Escorza, Y. Impact of academic integrity on workplace ethical behaviour. *Int J Educ Integr* 16, 2 (2020).  
<https://doi.org/10.1007/s40979-020-0051-3>
- Haleem et al., (2022). Understanding the role of digital technologies in education: A review, *Sustainable Operations and Computers*, 3, 275-285.
- Husna Hafiza, Roslina. (2021) Distance Education during COVID-19 Pandemic: The Perceptions and Preference of University Students in Malaysia Towards Online Learning. *(IJACSA) International Journal of Advanced Computer Science and Applications*, 12(4),118- 126
- Ives & Cazan. (2023) Did the COVID-19 pandemic lead to an increase in academic misconduct in higher education, *Higher Education* <https://doi.org/10.1007/s10734-023-00996-z>
- Kocdar, Serpil & Abdulkadir Karadeniz. (2018) Cheating and Plagiarism in E-Assessment: Students' Perspectives. *Open Praxis*, 10(3), 221-235. Retrieved Jan 2021
- Lina Elsalem et al., (2021) Remote E-exams during Covid-19 pandemic: A cross-sectional study of students' preferences and academic dishonesty in faculties of medical sciences. *Annals of Medicine and Surgery*. <https://doi.org/10.1016/j.amsu.2021.01.054>
- McDonnell & Tantong. (2023) The Evolution of Academic Dishonesty: A Review of The Latest Trends and Solutions to Student Cheating Practices in Online Education. *Journal of Education Naresuan University* Vol.25 No.3 July – September 2023
- Meital Amzalag et al., (2021) Two Sides of the Coin: Lack of Academic Integrity in Exams During the Corona Pandemic, Students' and Lecturers' Perceptions. *Journal of Academic Ethics* <https://doi.org/10.1007/s10805-021-09413-5>

- Minnaar. (2012). A Framework for Controlling Dishonesty In Open And and Distance Learning (ODL) In Higher Education. *Journal of Teaching and Education*, 1-13. Retrieved January 2021
- Mukasa et al., (2023) Academic dishonesty by students of bioethics at a tertiary institution in Australia: an exploratory study. *International Journal for Educational Integrity* 19:3 <https://doi.org/10.1007/s40979-023-00124-5>
- Nor Lailatul Azilah Hamdzah et al., (2020) A Study On Academic Dishonesty Among University Students: The Implementation Of University Policy And Students' Awareness On Academic Dishonesty. *Journal of Human Capital Development*. Vol. 13 No. 1 January-June 2020
- Olasile Babatunde Adedoyin & Emrah Soykan. (2020) Olasile Babatunde Adedoyin, Emrah Soykan. (2020). Covid-19 pandemic and online learning: the challenges and Opportunities. *Interactive Learning Environments*, 1-13. doi:10.1080/10494820.2020.1813180
- Oleksii Nalyvaiko et al., (2022) Academic Integrity in The Conditions Forced Distance Learning. *Open Educational E-Environment of Modern University*. November 2022 Doi: 10.28925/2414-0325.2022.137
- Polona Šprajc et al., (2017) Reasons for Plagiarism in Higher Education. *Organizacija*, Volume 50. Number 1, February 2017. DOI: 10.1515/orga-2017-0002
- Radha et al., (2020) E-Learning during Lockdown of Covid-19 Pandemic: A Global Perspective. *International Journal of Control and Automation*, Vol. 13(4), 1088-1099. Retrieved April 12, 2021, from file:///F:/PANDEMIC/E-LearningduringLockdownofCovid-19PandemicAGlobalPerspective.pdf
- Reedy, A., Darius Pfitzner, Laura Rook and Leonie Ellis (2021) Responding to the COVID-19 emergency: student and academic staff perceptions of academic integrity in the transition to online exams at three Australian universities. *International Journal for Educational Integrity*. <https://doi.org/10.1007/s40979-021-00075-9>
- Roslan Abdul Wahab et al., (2022) The Impact of Covid-19 on Academic Dishonesty: Malaysian Evidence. *International Journal Of Academic Research In Accounting, Finance And Management Sciences* Vol. 12, No. 2, 2022, E-Issn: 2225-8329
- Selvanathan et al., (2020) Students learning experiences during COVID-19: Work from home period in Malaysian Higher Learning Institutions. *Teaching Public Administration*. Volume 41, Issue 1, 1-10. <https://doi.org/10.1177/0144739420977>
- Simamora. (2020) The Challenges of Online Learning during the COVID-19 Pandemic: An Essay Analysis of Performing Arts Education Students. *Studies in Learning and Teaching SiLeT*, Vol. 1, No. 2, August 2020: 86-103. <https://doi.org/10.46627/silet>
- Sirdeshmukh. (2021). Academic misconduct spikes during pandemic, professors offer solutions. Retrieved from <https://www.dukechronicle.com/article/2021/04/duke-university-academic-misconduct-student-professor-cheating-stress>
- Slade. (2020) Reflections on Academic Integrity and Academic Development during COVID-19 at The University of Queensland, Australia. International Center for Academic Integrity.
- Stoesz & Eaton. (2022) Academic Integrity Policies of Publicly Funded Universities in Western Canada. *Educational Policy* 2022, Vol. 36(6) 1529-1548, <https://doi.org/10.1177/0895904820983032>

- Subin, S. (2021). How college students learned new ways to cheat during pandemic remote schooling. Retrieved from <https://www.cnbc.com/2021/03/21/how-college-students-learned-new-ways-to-cheat-during-covid-.html>
- Suhaida, H., Nurfaizah, K., Mohsinin, M. (2021) Instructional Technologies Facilitating Open Distance Learning: Environment, Interaction, and Academia. *ESTEEM Journal of Social Sciences and Humanities*, 5(1) 116-125
- Syezreen Dalina Rusdi et al., (2019) Academic Dishonesty among Tertiary Students in Malaysia. *International Journal of Academic Research in Business and Social Sciences* Vol. 9, No. 3, March, 2019, E-ISSN: 2 22 2 -6990
- Tahira Bibi & Amtul Hafeez (2018) Exploration of Plagiarism Practices in Open and Distance Learning (ODL) *Pakistan Journal of Distance & Online Learning Volume: IV, Issue I, 2018, 49-62*
- Tosuncuoglu. (2018, August). Importance of Assessment in ELT. *Journal of Education and Training Studies*, 163-167. Retrieved Jan 2021, from URL: <http://jets.redfame.com>
- Zarfsaz. & Rogayeh Ahmadi. (2017). Investigating Some Main Causes and Reasons of Writing. *International Journal of Applied Linguistics & English Literature*, Vol. 6 (5), 214-223. doi:10.7575/aiac.ijalel.v.6n.5p.214