



INTERNATIONAL JOURNAL OF
EDUCATION, PSYCHOLOGY
AND COUNSELLING
(IJEPC)

www.ijepec.com



THE EFFECTIVENESS AND ACCOUNTABILITY OF ONLINE
LEARNING ASSESSMENT DURING COVID-19's MOVEMENT
CONTROL ORDER: (A CASE OF KUPTM)

Mohd Zahrul Baharin¹, Soraya Sharifuddin²

¹ Kolej Universiti Poly-Tech MARA
Email: zaharulbaharin@kuptm.edu.my

² Kolej Universiti Poly-Tech MARA
Email: soraya@kuptm.edu.my

Article Info:

Article history:

Received date: 15.02.2022

Revised date: 01.03.2022

Accepted date: 15.03.2022

Published date: 31.03.2022

To cite this document:

Baharin, M. Z., & Sharifuddin, S. (2022). The Effectiveness And Accountability Of Online Learning Assessment During Covid-19's Movement Control Order: (A Case Of KUPTM). *International Journal of Education, Psychology and Counseling*, 7 (45), 464-477.

DOI: 10.35631/IJEPC.745035

This work is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)



Abstract:

Teaching assessment is a significant foundation to be evaluated in higher education so as to distinguish improvement or any necessity needs in connection to teaching and learning quality. Since the implementation of MCO out of the impact of COVID-19, students learning session is severely impacted especially on the assessments. In-class assessments are no longer viable thus resulting the online assessments mode for all teachers and students. The purpose of this research is to study the effectiveness and accountability of online assessments in comparison with traditional assessments as well as to see the perception of students towards online learning during MCO. Data were collected using online questionnaire from respondents of higher learning institutions in Malaysia. The data were then analyzed using descriptive statistics using Statistical Package for Social Sciences (SPSS version 23.0.). The findings revealed low effectiveness and low accountability towards online assessments, but high perception towards online learning. The future scope of this study should be expanded to the type of assessments preferred by students during MCO and factors contributing to the effectiveness of online assessment.

Keywords:

Online Assessment, COVID-19, Effectiveness, Accountability, MCO

Introduction

The idea of online learning in higher education have long been researched and talked through in numerous studies since the past few decades. Be that as it may, the definition is still indistinct

as there are many definitions of online assessments set by researchers. Gikandi et. al (2011) characterizes each online assessments as different by its own by comparing it to face-to-face environments, given the asynchronous interactivity among online participants, clearly showed that e-assessments encompasses around the interaction from two spectrum of both teachers and learners.

Moreover, the concept of e-assessments also incorporates between the factors of humanities and digitalization as mentioned by Osuji (2012), e-assessment could be conceptualized as the use of ICTs to facilitate the entire assessment process, from the designing and delivering of assignments to marking (by computers, or human-assisted by digital tools), reporting, storing the results and/or making the statistical analysis.

Online assessments are also found to play an interestingly important role of transforming higher education to a new level about how to utilize its full potential to transform students' learning and lecturers' work, as mentioned by Whitelock (2012). This include the evolution of formative and summative assessments, as dictated by Pachler et. al. (2010) who stressed the importance of formative assessments' role to students to enable them to take charge to their own learning process and to become a resource for other students.

(Betlej 2013; Spivey and Mcmillan 2014) stated many advantages of online assessments to students as the randomization of exam questions and repeating the test would provide different perspective to students' pattern of answering questions. However, Gewertz, C. (2013) cited that the quality of result taken through online assessments will depend on the students' level of preparedness consequently will influence their grade. Thus, in the view of perception, Awofeso, N. & Bamidele, M. (2014) mentioned higher satisfaction of online assessments among students.

COVID-19 phenomena has changed the face of education – probably forever. World Economic Forum (2020) mentioned the statistics showed that 1.2 billion children in 186 countries are closed due to the pandemic and only students in South Korea responded to roll calls from their teachers through online. Therefore, the transition of online learning among majority of university is already at global scale. Zhejiang University, for instance, managed to get more than 5000 courses online just two weeks into the transition using “DingTalk Zhu” and The Imperial College London started offering a course on the science of coronavirus in online which is now the most enrolled class in 2020 on Coursera.

To note, online assessments without a doubt pose challenges to many. Students without reliable internet access or technology struggle to participate. The gap is larger in income brackets within and between countries. For example, 95% of students in Switzerland, Norway and Australia have computer while only 34% in Indonesia do, as statistics reported by OECD Data (2020). In the US, the different is significant between those from privileged and disadvantaged backgrounds.

In the case of higher education in Malaysia, many varsities have moved their classes online to minimize the spread of infection, as mentioned by Universiti Malaya's Academic Enhancement and Leadership Development Centre (ADeC) e-learning head Dr Zahiruddin Fitri Abu Hassan (2020). This responsible step is not only compulsory but also vital in safeguarding the community from exposure of the COVID-19 virus, Parmjit, S. (2020). In addition, Dr Parmjit

also adds that most universities in Malaysia has already equipped with well-developed frameworks, tools, support facilities and infrastructure to handle both synchronous and asynchronous learning, The Star (2020).

The reason of this research is conducted is to analyze the level of accountability when doing online assessment, which in a simple word to see how students view 'online cheating'. According to (Bajinath & Singh, 2019), based on the studies from over 14 countries that examining research on cheating practices in Higher Education (HE), they identified cheating as the international issues, with technology plays the main tool in enabling cheating. As mentioned by (Stoesz & Eaton, 2020) in Canadian study, cheating becomes a form of academic dishonesty, due to student's violation of academic integrity, over 412 faculty members involved and half of the respondents see the issue happened because of the weak policies and regulation prepared by Higher Education (HE). Other than that, students feels the pleasure of cheating online, and thought that it is easier to just cut or copy and paste, they do not even see it as an issue of plagiarism (Larkin, Szabo, & Wimsatt, 2017). These recent findings led researcher to conduct this research in order to see KUPTM students' readiness in online learning, as well as their academic integrity when completing online assessments.

The objective of this research is mainly to study the effectiveness of online assessments in comparison with class assessments during MCO period among students of higher learning institutions in Malaysia. Also, the researcher major aims are to find out the level of accountability and perception of respondents towards online assessments and learning during MCO.

Literature Review

The Efficiency of Online Learning Assessments during COVID-19 MCO (Movement Control Order)

According to (Ali & Dmour, 2021) most students agreed that online assessment which carried by the user interface give more opportunities and chances to score because of fast or quick results that will be received compared to physical assessment. Students are also able to study following their self-pace, in which it allows the students to learn at his or her own steps, without pressuring themselves. As stated by (Kearns, 2012), the production of students' assessment in online discussion has given the students the opportunity to analyse and think critically in order to complete the given task via social media platforms.

The students tend to have a deep engagement in relating their personal experiences and the topic that they have discussed. As a result, group assignment is easier to complete. Online learning assessment allows students to expose and express their creativity with unique learning environment. The assessments given through online will take less time to complete due to the students' ability to understand concept much easier with clear instruction and rubric, besides having relaxed communication with their peers (Baleni, 2015).

Accessibility of online learning assessment is also convenience, since there are various online platforms in education that have been used globally to convenience the job of educators in handling assessment (Goodwin, Sutherland, Roarson, & Drange, 2012). The efficiency of online learning assessment can be seen as one of the tremendous achievements for young learners or students to expose themselves with the use of technology in education. This healthy

awareness of moving to technological era, will produce creative and talented students. The use of various online platform encourages the young learners and teachers to discover the beauty of new knowledge that can be absorbed around the world (Coman, Gabriel T, îru, an-Schmitz, Stanciu, & Bularca, 2020).

Accountability of Students while Performing Online Assessments.

Online assessments are also found to play an interestingly important role of transforming higher education to a new level about how to utilize its full potential to transform students' learning and lecturers' work, as mentioned by Whitelock (2012). This includes the evolution of formative and summative assessments, as dictated by Pachler et. al. (2010) who stressed the importance of formative assessments' role to students to enable them to take charge to their own learning process and to become a resource for other students. The problem that will be issued in online assessment will be the validity of the assessment and accessibility to complete the assessment.

(Al Rawashdeh, Mohammed, Al Arab & Alara) stated that, the lack of face to face and interaction between students and lecturer will contribute to the higher chances in decreasing interest and encourage academic dishonesty. Students tend to plagiarize and checking the answer from google or any assessable websites in order to complete the task in illegal way (Joshi, Saiyad, & Singh, 2020). In addition, students tend to check the answers with their peers via social media platforms to answer the quizzes or tests. According to (Gamage, Silva, & Gunawardhana, 2020) the pressure of academic performance among students leads to the higher tendency for the students to use cheating as a reason to complete the tasks of assessment. Besides, in completing the tasks students will be facing the difficulty in working with group members. This is including the technical issues like internet connection, laptop or desktop problem and members' participation.

As online assessments are related to the coverage of internet, there might be an issue to get a better coverage in certain areas. According to (Alruwais, Wills, & Wald, 2018) poor accessibility of the internet and technology equipment will be a challenge for the students to complete the assessment. Meanwhile in member's participation, online assessment however creates a potential "Isolated Learners" where the students who have anxiety to work with technology feels inferior when it comes to complete the task, due to the weakness in communication and lack of literacy technology skills as stated by (Gillett-Swan, 2017).

Positive Preferences of Students Towards Online Learning Assessment During MCO.

Based on the study conducted by (CAZAN & INDREICA, 2014), it stated that online assessment considered as a crucial measurement of higher education, due to the advantages in increasing motivation, flexible, saving cost and able to obtain individualized feedbacks compared to traditional assessment. In online learning, students become more confident and comfortable to answer the test or quiz during online session because it lessened their anxiety in completing the tasks. According to (Schunk & DiBenedetto, 2020), the different practice from online assessment benefits the students in terms of method in performing the assessment and flexibility in delivering the assessment, due to the fact that they did not face the motivation distraction that they might face during the traditional assessment in classroom setting. For example, the feeling of inferior, anxiety in answering the questions and etc. Besides, according to (Alhazmi, et al., 2021), students able to manage their own stress independently since they control the learning following their owned self- paced.

This however leads to self- efficacy theory by Bandura in which a human believes in his or her ability to produce a performance at designated level. Students have more time to study during online assessment, the convenience instruction given by the lecturer make the students feel comfortable to explore their ability in handling the assessment with online environment. The students have opportunities to reflect their understanding towards the lesson they learnt and able to collaborate with their peers in discussing their knowledge via online learning (Dziuban, et al., 2015).

Negative Preferences of Students towards Online Learning Assessment During MCO.

On the other side of students' positive preference towards online learning assessment during MCO, there are several challenges that has been faced by the students. The first will be the technical error (audio, video, internet connection and etc) that will badly affect the quality of delivering their assessment. As stated by (Mahyoob, 2020), the problem in internet speeding is a huge challenge for the students to deal with online assessment, especially to those that are coming from the remote town will have difficulty in downloading materials, online exam conducting and assessing instruction to certain online platforms.

Next, is the feeling of anxiety and shyness in presenting online. Even though it is not presented in a natural way in front of their peers; however, the students able to feel the pressure and the judgement from others that watch them presenting face to screen. Shy person is most likely to appreciate online presentation, compared to non- shy person, however there is a feeling of rejection in order for the person to perform well in online presentation in phycological aspects such as the background experience, the traumatic moment and etc as mentioned in the study of Shyness and Computer Meditated Communication: A Self Presentational Theory Perspectives by (Stritzke, Nguyen, & Durkin, 2004). Shyness issue in online presentation refers to stuttering, less eye contact, inattentive body language, the monotonous tone of voice and etc.

Last, online assessment is difficult to handle because there is no direct feedback and real face to face communication with the instructor. (Alawamleh, Al-Twait, & Al-Saht, 2020) mentioned that without effective communication between instructor and student, there will be no positive motivation for the students to complete the tasks successfully. Effective communication covers the area of delivering message with accurate facial expression and body language to get better understanding on the message or delivery given by the sender.

Methodology

This research used a data-set of questionnaire collected from respondents that are students of higher learning institutions such as university and college across Malaysia. The data is collected through online platform called Google Forms and then were analyzed using frequencies and descriptive statistics using Statistical Package for Social Sciences (SPSS) version 22.0.

The process of conducting the survey stats with the help of some lecturers from KUPTM distributing the online form to their students of online class during the implementation of distance learning during Movement Control Order. Respondents then need to complete the questionnaire as feedback. After the process is completed, researcher analyzed the responses and tabulated them into SPSS 22.0 application.

The questionnaire has four (4) parts which consists of 17 items. These parts are demographic, Effectiveness and Accountability, and Perception. Each item assessed using five-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Satisfactory, 4 = Agree, 5 = Strongly Agree) choices. Details of items can be represented in Table 1.

FACTOR	ITEM
DEMOGRAPHIC	A1: Gender A2: Age A3: Learning Institution A4: Level of Education A5: Internet availability during MCO
EFFECTIVENESS	B1: Online quiz is easier to answer than traditional quiz B2: Online assessment takes less time to complete B3: I understand the class better during online session B4: Group assignment is easier to complete during MCO B5: During online class and assessment, I am able to get my hands on the learning materials better
ACCOUNTABILITY	C1: During online assessment, I tend to look for answers in Google C2: When answering online assessment, I discuss with my friends first before I answer C3: I refer to my notes and textbook before I answer C4: I believe copy and paste during online assessment is acceptable by my instructor D5: My group member is not doing their work throughout the group assignment process
PERCEPTION	D1: I prefer online assessment rather than traditional assessment (carried out in class) D2: I have more time to study during online Assessment D3: I am shy during online presentation D4: I believe technical error (such as audio, video, and internet connection) will badly affecting my marks D5: I am more confident to answer the test or quiz during online assessment rather than in class D6: I believe online assessment is difficult for me

Table 1: Effectiveness and Accountability of Online Assessment during Movement Control Order

This study objectives are as follows:

RO1: To investigate the efficiency of online learning assessments during COVID-19 MCO.

RO2: To study how MCO is affecting the accountability of students while performing online assessments.

RO3: To study the preference of students towards online learning assessment during MCO

Findings and Discussion

Before the survey is distributed to the public, the researcher conducted pilot study to 16 students to test the reliability of the questionnaire. The survey test is then analyzed using SPSS's Cronbach Alpha Reliability Test (.765). (.746) and shown in the table below.

Cronbach's Alpha Reliability Statistics

Cronbach's Alpha Based on Standardized		
Cronbach's Alpha	Items	N of Items
.765	.746	17

Table 2: Pilot test of The Effectiveness and Accountability of Online Learning Assessment during MCO

This study was conducted towards 74 respondents across various higher learning institutions in Malaysia. The distribution of responses according to the data collected is shown in the following tables.

		Frequency	Percent
Gender	Female	62	83.8
	Male	12	16.2
	Total	74	100.0

Table 3: Gender of Respondent

The largest sample were female respondents which comprises of 62 respondents (83.8%) meanwhile male respondents comprises of only 12 (16.2%).

		Frequency	Percent
Age	18-21	45	60.8
	22-24	25	33.8
	25-28	3	4.1
	29 and above	1	1.4
	Total	74	100.0

Table 4: Age of Respondent

Among all respondents (n = 74), majority of them are in the age of between 18-21 years old (60.8%), following 22-24 years old (33.8%) meanwhile age 25-28 and 29 and above are minority at respectively (4.1%) and (1.4%).

		Frequency	Percent
Institution	Private Sector	63	85.1
	Public Sector	10	13.5
	Missing	1	1.4
	Total	74	100.0

Table 5: Learning Institution of Respondent

According to Table 5, respondents were recorded studying at both public and private sector with majority of the respondents ($n = 74$) are 63 students of private sector (85.1%) and 10 students of public sector (13.5%).

		Frequency	Percent
Level of education	Diploma	46	62.2
	Degree	26	35.1
	Masters	2	2.7
	Total	74	100.0

Table 6: Level of Education of Respondent

Table 6 depicted the data for the level of education of the respondents. 46 of respondents (62.2%) are the students of Diploma, 26 students (35.1%) are Degree students and 2 students (2.7%) are Masters students. All of these students took online class and assessment during the period of Movement Control Order.

		Frequency	Percent
Internet Availability	Always available	34	45.9
	Occasionally available	37	50.0
	Seldom available	3	4.1
	Total	74	100.0

Table 7: Internet Availability of Respondent

In order to see how effective online platform is to respondents' learning curve during COVID-19, researcher asks the availability of internet in the survey. Table 7 illustrated that among all respondents ($n = 74$), 34 respondents (45.9%) said that they always have the internet connection. 37 respondents (50%) said that the internet connection is only available occasionally and 3 respondents (4.1%) seldom have the internet connection. The data simply shows that half of the respondents have limited access to internet connection thus bringing impact to their educational performance if class and assessments were conducted in online mode.

Factor	Statement	Mean	SD
Effectiveness	A1: Online quiz is easier to answer than traditional quiz	3.56	.994
	A2: Online assessment takes less time to complete	2.89	1.255
	A3: During online class and assessment, I am able to get my hands on the learning materials better	2.66	1.088
	A4: I understand the class better during online session	2.50	1.230

A5: Group assignment is easier to complete during MCO	2.09	1.062
---	------	-------

Table 8: Descriptive Statistics of Effectiveness of Online Assessment

Table 8 illustrated the mean score for Section A to calculate the effectiveness of online assessment in comparison with traditional assessment carried out in class. Statement A1 has the highest mean score (Mean = 3.56, SD = .994) shows that respondents agree that online quiz is easier to answer than traditional quiz. On the other hand, statement A5 “Group assignment is easier to complete during MCO” has the lowest score (Mean = 2.09, SD = 1.06) significantly shows that respondents do not favor group assignment during MCO. This is due to obvious reasons such as obstacles in communicating and keeping up with the progress of each other during the completion of the assignment.

To note, statement A3 “I understand the class better during online session” scored in between the scale of effectiveness and not effective (Mean = 2.50, SD = 1.23). This shows that students understanding during online class is balance with the traditional classroom. Meanwhile, statement A3 “During online class and assessment, I am able to get my hands on the learning materials better” and A2 “Online assessment takes less time to complete” both scored above the average of mean score respectively (Mean = 2.66, SD = 1.08) and (Mean = 2.89, SD = 1.25). This score depicts that respondent believe that online assessments enable them to find materials easier and the assessments took less time to complete compared to traditional assessments.

Overall, this section intent to analyze the effectiveness of online assessment during the Movement Control Order and it is seen that online assessment is not effective for group task. However, respondents believe that online quiz is easier to do rather than traditional assessment.

Factor	Statement	Mean	SD
Accountability	B1: I refer to my notes and textbook before I answer	3.87	1.006
	B2: During online assessment, I tend to look for answers in Google	3.79	1.059
	B3: When answering online assessment, I discuss with my friends first before I answer	3.63	1.129
	B4: My group member is not doing their work throughout the group assignment	3.17	1.317
	B5: I procrastinate when I receive assignment from my instructor	3.01	1.276
	B6: I believe copy and paste during online assessment is acceptable by my instructor	2.47	1.346

Table 9: Descriptive Statistics of Accountability of Respondents during Online Assessment

From Table 9, it is shown that the overall mean score of responses ranged from 2.47 to 3.87 (out of 5.00) which in Likert Scale this value is found in the range of Strongly Disagree to Strongly Agree level. For Accountability factor, statement B1 “I refer to my notes and textbook before I answer” shows the highest mean score (Mean = 3.87, SD = 1.00) which means respondents tend to have lower accountability during the undertaking of online assessments, while the lowest mean score comes from statement B6 “I believe copy and paste during online assessment is acceptable by my instructor” (Mean = 2.47, SD = 1.34) which shows that respondents still maintain higher accountability in relation to plagiarizing work.

Key statements to this accountability factor are rested on statement B2 “During online assessment, I tend to look for answers in Google” (Mean = 3.79, SD = 1.05), and B3 “When answering online assessment, I discuss with my friends first before I answer” (Mean = 3.63, SD = 1.12), which conclude that the accountability of respondents are very low when receiving online tasks or answering online quiz. These shows that majority of respondents tend to find answers on search platform before answering. Also, it can be said that it is quite common for respondents to seek help and refer to their friends before submitting their final answers.

In conclusion, for the accountability section, it is clear that majority of respondents were less accountable when answering their online assessment rather than having the assessment physically. However, respondents did show high accountability when it comes to plagiarizing their work.

Factor	Statement	Mean	SD
Perception	C1: I believe technical error (such as audio, video, and internet connection) will badly affecting my marks	4.18	1.130
	C2: I am more confident to answer the test or quiz during online assessment rather than in class	3.56	1.261
	C3: I believe online assessment is difficult for me	3.48	1.241
	C4: I have more time to study during online Assessment	2.89	1.288
	C5: I am shy during online presentation	2.86	1.492
	C6: I prefer online assessment rather than traditional assessment (carried out in class)	2.35	1.359

Table 10: Descriptive Statistics of Perception towards Online Assessment

Table 10 portrayed the perception of respondents towards online assessment and the overall mean score for perception section ranged in the spectrum in mean score between 2.35 to 4.18 (out of 5.00) which in Likert Scale this value is found in range of Strongly Disagree to Strongly Agree level. Based on the mean score, the highest mean score is recorded on statement C1 “I believe technical error (such as audio, video, and internet connection) will badly affecting my marks” (Mean = 4.18) (SD = 1.13). This statement shows that students’ perception towards academic achievement is affected by technical errors that are beyond their control.

On the other hand, statement C5 “I prefer online assessment rather than traditional assessment” depicted low score (Mean = 2.35) (SD = 1.35) and concluded that the students’ acceptance of online assessment is very low compared to traditional assessment.

Respondents shows high confident in answering online test rather than having to answer them in class according to high mean score of statement C2 “I am more confident to answer the test or quiz during online assessment rather than in class” (Mean = 3.56) (SD = 1.26). This high score is due to very low accountability score found in previous section’s statements B1 and B2 whereby respondents have more freedom to check for answers and refer to their notes and materials before submitting their final answer.

Analysis of Findings

After analyzing the mean score of the 16 statements that are divided into three different sections namely effectiveness, accountability and perception, the researcher proceed with recoding all statements into separate section, comparing the mean score of each of the variables.

Summary of Mean Score				
	N	MEAN	STD. DEVIATION	OUT OF 100%
EFFECTIVENESS	74	2.74	.730	54.8%
ACCOUNTABILITY	74	3.32	.706	66.4%
PERCEPTION	74	3.22	.600	64.4%

Table 11: Summary of Mean Score of Effectiveness, Accountability and Perception

Table 11 depicted the summary of the three variables discussed in the findings. In brief, it is seen that the mean score of all sections are in between 2.74 to 3.22 only (out of 5.00) and this simply shows that the scores are not high albeit a little high above average.

For Effectiveness section, the mean score is 2.74 out of 5.00 (54.8%) which signals that respondent thinks that online assessment is not as effective as physical assessment carried out in class. Next for Accountability section, the mean score is 3.32 out of 5.00 (66.4%) shows that respondents have below average accountability when doing online assessments. This can be seen from high score of statement B1 and B2 where students prefer to ask friends and look for answers in textbook or Google before submitting their final answer. Finally, for Perception section, the mean score is 3.22 out of 5.00 (64.4%) illustrates that students acceptance of online assessment is above average. This can be seen from statement c5 where students do not prefer online assessments in comparison with assessments conducted physically.

Conclusion

In brief, the findings revealed that the effectiveness of online assessment is insignificant in comparison to assessments conducted physically in class. The study similarly concluded that respondents were not accountable enough in doing their assessments in virtual platform. This is evident from the score of 66.4% out of 100%. On the other hand, the findings discovered the perception of respondents towards online class are very high which means the students prefer online assessments rather than having it done in class. The findings revealed low effectiveness and low accountability towards online assessments, but high perception towards online learning. The future scope of this study should be expanded to the type of assessments preferred by students during MCO and factors contributing to the effectiveness of online assessment. For future recommendation, the questionnaire can be expanded to other research perspective such as type of assessments preferred to be taken online, factors contributing to the ineffectiveness of online assessments and the impact of COVID-19 to the teaching and learning of students at higher learning institutions.

It is the expectation of the researchers that this study would contribute towards providing further insights among lecturers in ways to conduct assessments within the new normal of COVID-19 phenomena.

References

- Alhazmi, A., Al-Kumaim, N., Mohammed, F., Gazem, N., Shabbir, M., & Fazea, Y. (2021). Exploring the Impact of the COVID-19 Pandemic on University Students' Learning Life: An Integrated Conceptual Motivational Model for Sustainable and Healthy Online Learning. *Sustainability* 2021, 13, 2546. <https://doi.org/10.3390/su13052546>.
- Ali, L., & Dmour, N. (2021). The Shift to Online Assessment Due to COVID-19: An Empirical Study of University Students, Behaviour and Performance, in the Region of UAE. *International Journal of Information and Education Technology*, Vol. 11, No. 5, May 2021.
- Alruwais, N., Wills, G., & Wald, M. (2018). Advantages and Challenges of Using e-Assessment. *International Journal of Information and Education Technology*, Vol. 8, No. 1, January 2018.
- Awofeso, N., & Bamidele, M. (2014). Efficient instructor feedback: Perceptions of online UAE undergraduate and postgraduate public health learners. *Application and Theory of Computer Technology*, 2(3), 35–47.
- Baleni, Z. G. (2015). Online formative assessment in higher education: Its pros and cons. *Journal of e-Learning* Volume 13 Issue 4 2015, (pp228-236) available online at www.ejel.org.
- Betlej, P. (2013). E-examinations from student's perspective – The future of knowledge evaluation. *Studia Ekonomiczne*, 152, 9–22.
- CAZAN, A. M., & INDREICA, S. E. (2014). Traditional Assessment of Learning Versus Online Assessment. The 10th International Scientific Conference eLearning and software for Education Bucharest, April24-25, 2014.
- Cathi, L. & Farah, L. (2020). The COVID-19 pandemic has changed education forever. This is how. <https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/>. Accessed 16 July 2020.
- Christina, C. (2020). Learning mustn't stop with Covid-19. <https://www.thestar.com.my/news/education/2020/03/29/learning-mustnt-stop-with-covid-19>. Accessed 16 June 2020.
- Dziuban, C., Moskal, P., Thompson, J., Kramer, L., DeCantis, G., & Hermsdorfer, A. (2015). Student Satisfaction with Online Learning: Is it a Psychological Contract? Research Initiative for Teaching Effectiveness University of Central Florida.
- Gamage, K., Silva, E., & Gunawardhana, N. (2020). Online Delivery and Assessment during COVID-19: Safeguarding Academic Integrity. *Educ. Sci.* 2020, 10, 301; doi:10.3390/educsci10110301 www.mdpi.com/journal/education.
- Gikandi JW, Morrowa D, Davis NE (2011). Online formative assessment in higher education: A review of the literature. *Comput Educ* 57:2333–.
- Gewertz, C. (2013). Transition to online testing sparks concerns. https://www.edweek.org/ew/articles/2013/10/30/10pencil_ep.h33.html. Accessed January 22, 2018.
- Gillett-Swan, J. (2017). The Challenges of Online Learning Supporting and Engaging the Isolated Learner. 2017 Vol. 10 No. 1 Special Issue: Business Management.
- Joshi, A., Saiyad, S., & Singh, T. (2020). Online Assessment : Concept and Application. Article in *Journal of Research in Medical Education & Ethics* • July 2020.
- Kearns, L. R. (2012). Student Assessment in Online Learning: Challenges and Effective Practices. *MERLOT Journal of Online Learning and Teaching* Vol. 8, No. 3, September 2012.

- Mahyoob, M. (2020). Challenges of e-Learning during the COVID-19 Pandemic Experienced by EFL Learners. Arab World English Journal (AWEJ) Volume 11. Number4 December 2020.
- OECD Data (2020). Learning remotely when schools close: How well are students and schools prepared? Insights from PISA. <http://www.oecd.org/coronavirus/policy-responses/learning-remotely-when-schools-close-how-well-are-students-and-schools-prepared-insights-from-pisa-3bfda1f7/> Accessed 13 June 2020.
- Osuji U (2012) The use of e-assessments in the nigerian higher education system. Turkish Online J Distance Educ 13(4):140–152.
- Pachler, N., Daly, C., Mor, Y. & Mellar H. (2010) Formative e-assessment: Practitioner cases. Comput Educ 54(3):715–721.
- Schunk, D., & DiBenedetto, M. (2020). Self-efficacy and human motivation. <https://www.researchgate.net/publication/346894235>.
- Stritzke, W., Nguyen, A., & Durkin, K. (2004). Shyness and Computer-Mediated Communication: A Self-Presentational Theory Perspective. MEDIA PSYCHOLOGY, 6, 1–22 Copyright © 2004, Lawrence Erlbaum Associates, Inc.
- Whitelock D (2009) Editorial: e-assessment: Developing new dialogues for the digital age. Br J Educ Technol 40(2):199–202.