INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PROGRESSIVE EDUCATION & DEVELOPMENT

OPEN ACCESS JOURNAL

Vol 11, Issue 4, (2022) E-ISSN: 2226-6348

Perception Massive Open Online Course (MOOCs) for Cytology in the Faculty of Health Sciences

Siti Nurshahida Nazli[1], Wan Ismahanisa Ismail[2], Rusnani Ab. Latif[3], Muhammad Nabil Fikri Roslan[2], Nurhidayah Ab Rahim[2], Nor Raihan Mohammad Shabani[2], Nadiatul Syima Mohd Shahid[1]

[1]Department Enviromental Health and Safety, Faculty of Health Sciences,Universiti Technology MARA Cawangan Pulau Pinang, Malaysia, [2]Department Medical Laboratory Technology, Faculty of Health Sciences,Universiti Technology MARA Cawangan Pulau Pinang, Malaysia, [3]Department of Nursing, Faculty of Health Sciences,Universiti Technology MARA Cawangan Pulau Pinang, Malaysia

To Link this Article: http://dx.doi.org/10.6007/IJARPED/v11-i4/15902 DOI:10.6007/IJARPED/v11-i4/15902

Published Online: 18 December 2022

Abstract

This paper explores online learners' preferences and experiences of using Massive Open Online Courses (MOOCs) among students Diploma Medical Laboratory Technology, Faculty Health Sciences UiTM Cawangan Pulau Pinang Branch, Campus Bertam. The paper thus intends to investigate the implementation of what online learners prefer and what they experience while using MOOCs for Cytology courses. The research employs an exploratory approach using quantitative data. In the present study, 87 students questionnaires were collected through the online questionnaire after using MOOC from March to July 2022 after one semester of learning Cytology in a physical class. The findings revealed that students have a better understanding and can know faster and better when using MOOC in Cytology courses. This study determines that satisfying MOOC participants' needs on the determination of competence through MOOC improve all aspects of engagement and success of cytology courses.

Keywords: MOOCs, Engagement, Online Courses, Cytology, Online Learning

Introduction

MOOCs being Massive Open Online Courses, are based on creating online learning for learners or students throughout the internet everywhere and anytime. These activities are more convenient and easy to attract students. The term MOOCs has attracted many scholars and researchers in the field of educational science, which is seen as a new revolution to define connecting and visiting learning on networks online(Olugbara & Letseka, 2019). UITM has already implemented the value purpose of online courses for many years. Massive courses cytology has already been published in 2021 and continues until today. It was changed from the traditional model by using textbooks that were instructed to students for many decades worldwide Alario-Hoyos et al., 2017; Naqbi et al., 2020). Lectures were offered traditionally

in special places, which, later on, were named schools where students received knowledge. The learning developments focus on consolidating different topics under one course to emphasize students' capabilities to learn about cytology. In formal education, the students attend the course physically and apply via online teaching thru MOOCs. This paper aims to understand the use of MOOCs among students and to help MOOCs online distance learning among students to improve collective experiences among students improving learning experiences throughout the integration of various technologies, environments, and content apply. MOOCs can enhance the quality of learning pedagogy, help accelerate collaboration, ensure social cohesion and promote sustainable growth (Olugbara & Letseka, 2019)

Literature Review

Massive Open Online Courses

The ministry of high education in Malaysia introduced MOOC as an initiative in 2014 to advance the quality of education. This initiative was documented in Malaysian Education Blueprint 2015 -2025.MOOCs are a milestone for Malaysia's higher education to be the first country to implement them (Naqbi et al., 2020). The introduction of MOOCs initiated by University Technology MARA by using the platform of Future can be assessed by a student that registers for those courses and also by the other people who are willing to join the online learning by the platform provided(Aziz, 2018) and can be assessed UiTM MOOC can be accessed at www.openlearning. com/uitm. The students can do all assessments online and all notes and lectures are provided through videos uploaded from the website and Ufuture UiTM platform. The specific courses the students required for their degree. This mode via online courses is lifelong learning; the students can recall back to refresh their knowledge at any time (Fidalgo et al., 2020; Yusuf & Al-Banawi, 2013).Online education is overgrowing while traditional learning still serves the students during when Covid-19 pandemic(Aboagye et al., 2021; Dhawan, 2020.; View of COVID-19 and E-Learning: The Challenges of Students in Tertiary Institutions, 2020.) As online learning offers a ready-access to the rich content of digital media, it enhances learning capabilities and technology, which often occur in the university activities such as information presentations, quizzes, and many online activities (Goh et al., 2015)

Perceived Effectiveness of MOOC

The student's engagement and effectiveness thru MOOC are essential to ensure that online learning is successful(Zhu, 2018). The previous study shows that MOOCs is about the potential and challenges of MOOCs for universities, MOOC platforms, learners and content in MOOCs, and lastly, the quality of MOOCs and instructional design issues (Zawacki-Richter et al., 2018). The effectiveness of MOOCs is dependent if whether that is related to the course of the students involved (Alario-Hoyos et al., 2017; Aziz, 2018). The difficulty of people with virtual online learning is based on knowledge lacking or previous learning ability such as academic, technical, and technological that related to preparation in handling the virtual tools transmission that involves mental information and how they create knowledge (Al-shami et al., 2018). Convenience has been a significant part of understanding the use of MOOCs because sometimes, the difficulty of using MOOCs will make the students left to use them MOOC(Al-shami et al., 2018; Goh et al., 2015).

Factors Influencing MOOC

MOOCs increased fastly and can be seen rapid growth after the pandemic Covid-19 (Dhawan, 2020)(Aziz, 2018). Many public universities studied MOOCs and used MOOCs as a medium to teach students. Findings revealed that students accepted MOOCs as a technology for learning and easy to adapt (Nordin et al., 2015)

The previous research shows the barrier while using online learning. The challenges come from that Internet cost and access, and technical problems are substantial barriers to open online learning while social

Method

This is a quantitative study, and primary data were used for the analysis. A questionnaire was collected from 87 students in the Department of Medical Laboratory Technology, Faculty of Health Sciences, University Teknologi MARA, Pulau Pinang Branch, Bertam Campus. The questionnaire was randomly distributed through an online Google form. The respondents were students actively using e-learning platforms for their regular course Cytology. The study was conducted during the semester from March to July 2022. The pilot study was undertaken and finalized with minor changes to the feasibility of the survey.

Result

Eighty-seven valid responses were recorded that qualified for data analysis—the respondents from cytology course in the Faculty of Health Science students**.** The students responded under three categories**:** MOOC Usability Evaluation, MOOC quality, and MOOC interface.

Respondents based on MOOC Evaluation Performance

This section presents students' evaluations from MOOC cytology courses. The majority of students from cytology MOOC agree 71(88.75%) on the usability of MOOC for cytology courses, and the students can learn better by using MOOC. Furthermore, 60 (70%) agree that the quality of MOOC towards information, content provided following the syllabus, organization, and video delivered very useful. Students agree 67 (77%) and 17(20%) strongly agree that the MOOC interface is helpful and function capabilities help for learning cytology courses.

Table 1
Respondent from MOOCs Cytology Courses

Students (n=87)	**Categories**	**Satisfaction**
71 (88.75%)	Usability Evaluation	Agree
10 (11.5%)		Strongly agree
7 (8%)		Moderate
25 (29.0%)	Quality	Strongly agree
2 (3%)		Moderate
60 (70%)		Agree
67 (77.0%)	Interface	Agree
17(20%)		Strongly agree
3 (4%)		Moderate

Students perception using Cytology MOOC

Table 2 shows the student's perceptions of MOOC use in cytology. Overall the students agree MOOC teaching is useful in a way better in learning cytology and 80 (91%) of students are comfortable using MOOCs.

Table 2
Students' perceptions towards Cytology MOOC

Students' perceptions of using MOOC (Questionnaire items)	**N=87 (Strongly agree)**	**N=87 (agree)**
I can learn the topic better when using this MOOC	9	78
I can learn the topic faster when using this MOOC.	19	68
I feel comfortable using this MOOC	7	80
I believe I am able to learn the topic productively when using this MOOC.	7	80
I can share my knowledge with my friends through this MOOC.	8	79
I gain additional information from my friends through this MOOC	6	82

Discussion and Conclusion

Overall the results gained from perception using MOOC Cytology among students satisfied the usability, quality, and interface. This indicates that the students accepted the use of MOOC as one of the learning platforms. The most positive results obtained were for the use of MOOC, quality, and interface conditions factors.(Al-shami et al., 2018; Goh et al., 2015; Marcial et al., 2015).

Easy access via an online platform is one of the primary resources students can use other than face-to-face. The video-lecture facility in MOOCs can motivate students to easily access course content continuously and help them to understand study materials through representations and give a good engagement with the students through the e-learning platform(Olugbara & Letseka, 2019.) The presentation of a course in MOOCs is clear and appropriate and important to help motivate the student's engagement to learn and improve their knowledge of the courses. This motivation allows them to finish the assessment given and use their references. The course contents in MOOCs are useful, well organized high quality, interactive, relevant, and up-to-date. The usefulness of MOOCs can offer a valuable source of knowledge that supports learning, enable the understanding of difficult curricula, improve student learning efficiency, fosters sharing of knowledge, and promote self-directed learning via an online learning platform. In future research, this MOOC course online practice could provide useful insights and help institutions, academics, and other stakeholders who plan to adopt MOOCs for ODL implementation to be aware of how teaching can be best delivered to promote effective learning in an ODL environment with using the right platform.

Acknowledgement

We want to thank all students from the Faculty of Health Sciences involved in the survey and

Universiti Teknologi MARA, Pulau Pinang Branch, Bertam Campus for their encouragement and and financial supports

Corresponding Author
TS DR Wan Ismahanisa Ismail
Department of Medical Laboratory Technology, Faculty of Health Sciences, Universiti Teknologi MARA, Cawangan Pulau Pinang, Kampus Bertam, 13200 Pulau Pinang, Malaysia
Email: ismahanisa@uitm.edu.my

References

Aboagye, E., Yawson, J. A., & Appiah, K. N. (2021). COVID-19 and E-Learning: The Challenges of Students in Tertiary Institutions. *Social Education Research*, 1–8. https://doi.org/10.37256/SER.212021422

Alario-Hoyos, C., Estevez-Ayres, I., Perez-Sanagustin, M., Kloos, C. D., & Fernandez-Panadero, C. (2017). Understanding Learners' Motivation and Learning Strategies in MOOCs. *The International Review of Research in Open and Distributed Learning*, *18*(3), 119–137. https://doi.org/10.19173/IRRODL.V18I3.2996

Al-shami, S. A., Aziz, H., & Rashid, N. (2018). The adoption of MOOC utilization among undergraduate students in Universiti Teknikal Malaysia Melaka (UTEM). *Journal of Fundamental and Applied Sciences*, *10*(6S), 2634–2654. https://doi.org/10.4314/jfas.v10i6S.

Aziz, A. (2018). Evaluating the Design Standard of UiTM Massive Open Online Courses. *International Journal of Education and Literacy Studies*, *6*(4), 138–151. https://doi.org/10.7575/AIAC.IJELS.V.6N.4P.138

Dhawan, S. (2019). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, *2020*(1), 5–22. https://doi.org/10.1177/0047239520934018

Fidalgo, P., Thormann, J., Kulyk, O., & Lencastre, J. A. (2020). Students' perceptions on distance education: A multinational study. *International Journal of Educational Technology in Higher Education 2020 17:1*, *17*(1), 1–18. https://doi.org/10.1186/S41239-020-00194-2

Goh, W. W., Kaur, S., & Chion, Z. H. A. (2015). The Perceptions of MOOC Among Learners Based on Activity Theory. *Taylor's 7th Teaching and Learning Conference 2014 Proceedings*, 331–340. https://doi.org/10.1007/978-981-287-399-6_30

Marcial, © D E, Caballero, R. D. B., Rendal, J. B., Patrimonio, G. A., Marcial, D. E., Dennis, R., Caballero, B., Supervisor, C., Rendal, J. B., & Patrimonio, G. A. (2015). *"I Am Offline": Measuring Barriers to Open Online Learning in The Philippines*. *45*, 1.

Nordin, N., Norman, H., & Embi, M. A. (2015). 1–16 (2015) Technology Acceptance of Massive Open Online Courses in Malaysia.*Malaysian Journal of Distance Education*, *17*(2), 1–16. https://doi.org/10.21315/mjde2015.17.2.1

Olugbara, T. C., & Letseka, M. (n.d.). *Exploring Factors Influencing the Adoption of Massive Open Online Courses for Open Distance Learning*.

Naqbi, S. W. M., Abdul Rahman. (2020). The Role of the Smart Learning Environment in Advancing the Smart Learning Process: Review. *International Journal of Advanced Science and Technology*, *29*(9s), 6113–6130.

View of COVID-19 and E-Learning: The Challenges of Students in Tertiary Institutions. (n.d.). Retrieved August 2, 2021, from

https://ojs.wiserpub.com/index.php/SER/article/view/ser.212021422/282

Yusuf, N., & Al-Banawi, N. (2013). The Impact of Changing Technology: The Case Of E-Learning. *Contemporary Issues in Education Research (CIER)*, *6*(2), 173–180. https://doi.org/10.19030/CIER.V6I2.7726

Zawacki-Richter, O., Bozkurt, A., Alturki, U., & Aldraiweesh, A. (2018). What Research Says About MOOCs-An Explorative Content Analysis. *International Review of Research in Open and Distributed Learning*, *19*.

Zhu, X. (2018). Facilitating Effective Online Discourse: Investigating Factors Influencing Students' Cognitive Presence in Online Learning. *Master's Theses*. https://opencommons.uconn.edu/gs_theses/1277