Teaching Customer Service Principles Using The Massive Open Online Course (MOOCs) Platform

Noor Azlina Mohamed Yunus¹, Norzawani Ibrahim^{2*}, Ibhrahim Zakaria³, Ahmad Zuhairi Zainuddin⁴, Mohammad Zaim Mohd Salleh⁵, Nur Najjah Abd Rahim⁶

^{1,2,3,4,5,6}Faculty of Business and Management, Universiti Teknologi MARA, Puncak Alam Campus, 42300 Selangor, Malaysia nooraz2939@uitm.edu.my1 nzawani@uitm.edu.my2* ibhrah2939@uitm.edu.my3 ahmadzuhairi@uitm.edu.my4 zaim3085@uitm.edu.my5 najjahabdrahim@uitm.edu.my6

*Corresponding Author

Received: 15 January 2024 Accepted: 25 February 2024 Date Published Online: 1 January 2024 Published: 1 January 2024

Abstract: This study reviewed the effects of a developing MOOC platform for Customer Service Principles course in higher education. Essentially, the Customer Service Principles course is designed to give knowledge and exposure about the fundamental of customer service and discover how to deliver customer service efficiently across various sectors. The development of a MOOC platform is believed to be an interactive learning method to attract and motivate students to clearly understand and to apply this course effectively. The originality of this study is the review of the MOOC platform as an interactive learning method specifically for Customer Service Principles course, something that has been unobserved by previous scholars. This study will contribute to the body of knowledge on the effect of the MOOC platform and to improve the learning activities for higher education institution.

Keywords: Massive Open Online Courses (MOOCs), Higher Education, Customer Service Principles.

1. INTRODUCTION

The Customer Service Principles is a course to utilize fundamental insights into both customer service and technological basics relevant in modern business. This course also highlights the significance of deeply comprehending the customer service sector, delving into current trends pivotal for effectively executing successful customer service strategies. However, this course needs to have additional tools to ensure that students can easily understand Customer Service Principles course regarding extensive new vocabulary and definition of terms. There are two main difficulties for those learning this course. Firstly, it is difficult for students to understand the definition and concepts of the terms used. Secondly, this course requires strategic thinking because it involves the adept management of customer expectations, ensuring the provision of desired products or services in a timely manner, and employing optimal approaches to align with, and fulfil these expectations satisfactorily (Business Queensland, 2023).

The existence of Massive Open Online Courses (MOOCs) functions as an interactive platform which consists of video lectures and interactive presentation materials. Not only that, this platform is also supported by quizzes and tests for students to encourage their self-awareness of progress and to know their level of understanding about the specific course (Laurillard, 2016). The beauty of this platform is that it also has a massive discussion forum among students around the world which enables them to share their understanding and opinion about the specific course. MOOCs also provide peer-reviewed assignments for students to improve their practice skills and deepen their understanding about the specific content. As the MOOC phenomenon advances, its impact on higher education becomes increasingly evident. Educational institutions worldwide are actively participating in the MOOC movement, leading to the initiation of diverse MOOC platforms (Wan et al., 2020).

The sensations of MOOCs platform are brought to the academic research. For instance, a study by Wan et al. (2020) in the context of higher education in China, investigated the factors effect university student's intention of using MOOCs platform. In addition, an empirical study by Firdaus et al. (2020) in the context of higher education in Indonesia, measured the perception and expectation of MOOCs users by using Fuzzy Servqual Method. Another

study by Nong et al. (2022), also in the context of higher education in China, explored the user determinant influencing user satisfaction of MOOC. The result shows that all of the factors such as perceived usefulness and perceived service quality, highly influence the user satisfaction of MOOC. However, there is still limited study reviewing the level of user satisfaction of MOOCs by focusing on specific courses. Therefore, the originality of this study is that it reviews the MOOC platform as an interactive learning method specifically for Customer Service Principles course among higher education students in Malaysia- something that has been unobserved by previous scholars.

2. LITERATURE REVIEW

2.1 MASSIVE OPEN ONLINE COURSE (MOOC)

The prevalence of online learning and teaching experienced a significant surge in 2020, primarily propelled by the global outbreak of the COVID-19 pandemic. Numerous researchers have endeavoured to comprehend the influence of stress on the emotional behaviours and academic achievements of students. In the majority of studies, these pre- and during-COVID behaviours were examined within the framework of traditional educational institutions migrating to online instructional formats (Tao et. al, 2023). In addition, the exponential expansion of Massive Open Online Courses (MOOCs) in recent years may be attributed to various variables. These factors encompass the escalating accessibility of online education platforms and the surging need for adaptable and cost-effective avenues for pursuing higher education. The initial Massive Open Online Courses (MOOCs) were introduced in 2011 by a consortium of professors from Stanford University. Subsequently, there has been a substantial proliferation of MOOCs, resulting in a significant increase in the quantity of available courses. Presently, over 900 colleges worldwide have embraced this educational platform, collectively offering an extensive repertoire of more than 59,000 courses. Due to the ramifications of the global pandemic, the enrolment figures for Massive Open Online Courses (MOOCs) reached a substantial total of 220 million students by the conclusion of 2021 (Shah et.al, 2022). Massive Open Online Courses (MOOCs) are predominantly cost-free educational programmes offered over the Internet and various multimedia platforms.

Massive Open Online Courses (MOOCs) provide a platform for a large number of students to access and engage with a wide range of courses of their choosing, fostering a culture of open learning and knowledge sharing. The three primary Massive Open Online Course (MOOC) platforms include Coursera, Edx, and Udacity (Li et al., 2023).

The Malaysian Ministry of Education (MOE) has published a Malaysian Education Blueprint for Higher Education (2015 to 2025), which includes the integration of Massive Open Online Courses (MOOCs) as a significant undertaking within the Malaysian educational framework. According to the Ministry of Education Malaysia (2015), Malaysia has expressed its aim to leverage Massive Open Online Courses (MOOCs) to enhance the quality of its higher education system. The objective is to offer interested learners the opportunity to access free and flexible learning options to get the highest level of education. Despite its initial design for casual learning, Massive Open Online Courses (MOOCs) have gained recognition from traditional academic institutions (Hendricks, 2021). The COVID-19 pandemic has revealed the unpreparedness of the higher education sector in adapting to the shift towards online learning. There has been a notable increase in the utilisation of pre-packaged Massive Open Online Courses (MOOCs) as an adjunctive method for instruction and learning (Sun et al., 2021). Numerous scholars who have conducted investigations on the effects of Massive Open Online Courses (MOOCs) in select developing nations have observed that these educational platforms possess the capacity to mitigate the educational disparity and enhance educational accessibility for persons who lack opportunities for conventional higher education (Cagiltay, 2023).

In general, Massive Open Online Courses (MOOCs) are regarded as contemporary and valuable resources utilised for providing accessible and high-quality education within a nation. Abelbisi et al. (2023) indicated that Massive Open Online Courses (MOOCs) have the potential to significantly revolutionise the teaching and learning process inside higher education. Massive Open Online Courses (MOOCs) possess the capacity to revolutionise the conventional educational setting by offering a vast multitude of learners, access to high-caliber learning opportunities. This is also supported by Zalli, Nordin, and Hashim (2019); Mansor et al. (2015) who posit that the establishment of Massive Open Online Courses (MOOCs) creates a good impact on the educational system in Malaysia.

This impact is achieved through various means, such as strengthening the branding of educational institutions, fostering increased collaboration among institutions, and facilitating educational advancement.

Massive open online courses (MOOCs) are utilised to support and perpetuate education, draw in a substantial number of students, and typically offer freely accessible courses (Zahrani, 2021). In addition, Massive Open Online Courses (MOOCs) exhibit a distinction from conventional online learning formats by virtue of their capacity to provide unlimited accessibility to a substantial demographic (Kaplan & Haenlein, 2016). In the Saudi Arabia context, Massive Open Online Courses (MOOCs) have brought about a transformation in the mode of delivery for higher education in Saudi Arabia (Alturki & Aldraiweesh, 2023). The findings of the study revealed that in countries with high-income economies, there was a higher proportion of student enrolment and a greater rate of engagement in various course activities, including viewing, exploring, completing, and obtaining certification. In contrast, countries with lower-income economies exhibited lower levels of student enrolment and lower rates of participation in these course activities (Cagiltay, 2023). According to Hou (2016), Xuetang is widely regarded as the most prominent Massive Open Online Course (MOOC) platform within the Chinese-speaking community. Typically, Massive Open Online Course (MOOC) platforms consist of three primary components, namely course content, community building tools, and platform technologies. The course content component holds great significance in this study. According to Shah et al. (2023), The MOOC's framework demonstrated a significant level of perceived utility, ranging from 84% to 92%, when utilised as a formative evaluation tool to examine the incorporation of learner-centric pedagogy and its impact on the design of Massive Open Online Courses (MOOCs). Diverse people recognised novel insights derived from various aspects of the framework.

2.2 HIGHER EDUCATION

Higher education institutions play a crucial role in promoting Massive Open Online Courses (MOOCs). The role of higher education in promoting MOOCs can be seen in various aspects, including instructional support, motivation for MOOC development, and the integration of MOOCs into traditional courses. One aspect of the role of higher education in promoting

MOOCs is the instructional support provided by universities. Instructors value the support they receive from their institutions in promoting systematic MOOC design and addressing technical issues related to MOOC platforms (Najafi et al., 2015). This support helps instructors in developing highquality MOOCs and ensures a smooth learning experience for students. Another crucial aspect of the higher education landscape is the drive behind MOOC development. Numerous educators are inspired to create MOOCs with the goal of broadening public access to high quality learning materials and demonstrating their institution's teaching methodologies. (Najafi et al., 2015). By offering MOOCs, universities can reach a wider audience and provide educational opportunities to individuals who do not have access to traditional higher education. Furthermore, higher education institutions are actively exploring the incorporation of MOOCs into conventional courses via hybrid programs. This strategy entails the utilization of both locally created and third-party MOOCs, integrating them with traditional coursework. (Pérez-Sanagustín et al., 2017). By incorporating MOOCs into traditional courses, universities can enhance the learning experience for students and provide them with a diverse range of resources and learning opportunities.

However, the creation of MOOCs can be a difficult and costly undertaking for higher education institutions. (Pérez-Sanagustín et al., 2017). Universities face challenges such as rising enrolment fees, constrained budgets, and the changing educational landscape (Pérez-Sanagustín et al., 2017). Despite these challenges, the role of higher education in promoting MOOCs remains significant, as it allows institutions to adapt to the evolving needs of learners and provide accessible and high-quality education.

2.3 CUSTOMER SERVICE PRINCIPLES COURSE

Fundamentally, the Customer Service Principles course is seeking to apply basic knowledge of customer service and technology fundamentals in business today. It also emphasizes a thorough understanding of customer service industry and explores the knowledge of current trends that lead to the successful implementation of customer service. It places a special emphasis on self-assessment and the mastery of the knowledge to improve individual and corporate productivity (AIMS, 2023). Additionally, this course provides fundamental guidelines and practices that businesses and

organizations can follow to ensure they deliver a positive and satisfying experience to their customers (Harris, 2014). Effective customer service is crucial for building customer loyalty, fostering positive relationships, and ultimately driving business growth (Harris, 2014). There are three (3) course learning outcomes for this course specifically, to apply concepts and principles of customer service in the current environment, to present concepts and principles in relation to customer service through verbal and non-verbal communication as well as to demonstrate information retrieval and management skills in customer service in real world events and current issues (AIMS, 2023). The recommended textbook for this course namely "Customer Service: A Practical Approach" authored by Harris (2014), focuses on providing a comprehensive understanding of customer service principles, strategies, and practices. The book aims to offer practical guidance to students, professionals, and anyone interested in delivering excellent customer service.

2.4 PERCEIVED USEFULNESS

Perceived usefulness pertains to "the extent to which an individual believes that the utilization of a specific system would enhance their job performance" (Davis, 1989). In an earlier research, Davis et al. (1989) identified usefulness as the most influential predictive factor in the adoption of information technology. According to the study by Rezvani et al (2022), perceived usefulness encompasses the assessment of information sources' worth across diverse products and services, the anticipated attributes associated with brands from both the customer and brand perspectives, as well as the introduction of new services or products into the market. Perceived usefulness becomes an important determinant that affects user satisfaction (Pozón-López et al., 2021; Daneji et al., 2019; Lu et al., 2019). The concept of perceived usefulness is integral to understanding learners' attitudes and behaviors toward MOOCs platforms. Grounded in the theory of Planned Behavior, this literature review has highlighted key determinants of perceived usefulness in the context of MOOCs.

MOOCs platforms furnish captivating materials designed to pique users' academic curiosity. Perceived usefulness fulfills the external drive of MOOC participants. MOOCs offer convenient accessibility, expanded choices, and adaptability. The attainment of perceived usefulness stands as a prerequisite

for the success of MOOCs, as noted by Limayem and Cheung (2011). This perception encompasses the quality of MOOCs and its correlation with satisfaction, as indicated by Freeze et al. (2010). In parallel, perceived interest emerges as a crucial inherent motivator for enrolling in MOOCs. Numerous investigations have affirmed the substantial impact of intrinsic motivation on users' contentment within online learning, as highlighted by Lu et al. (2019).

2.5 USER SATISFACTION

To assess students' satisfaction while using a MOOC in a customer service principles course, several factors should be considered. Firstly, the design of the MOOC and the services and tools provided by the MOOC platform can impact learners' perception of the course and their satisfaction (Wei et al., 2022). In their study, the researchers investigated the impact of MOOC design and platform services on learners' perception and satisfaction. They found that the design of the MOOC, including its user-friendliness and the availability of resources, significantly influenced learners' perception of the course. Learners were more satisfied with MOOCs that were well-designed and provided adequate support and resources. This highlights the importance of ensuring that MOOCs are designed in a way that meets the needs and expectations of learners (Wei et al., 2022). Technological support from instructors can also enhance learners' performance and satisfaction. When instructors actively engage with learners and provide support through the MOOC platform, learners are more likely to feel supported and satisfied with the course. This suggests that instructors should be trained to effectively use the technological tools and services provided by the MOOC platform facilitates learner engagement and support to ensure the success of a MOOC, making it user-friendly for learners (Wei et al., 2022). Additionally, instructors should be equipped with the necessary skills to effectively utilize the technological tools and services available on the MOOC platform to enhance learner engagement and satisfaction (Wei et al., 2022).

Secondly, assessments that challenge learners' understanding of the course content and allow them to apply what they have learned can improve learners' satisfaction (Wei et al., 2022). Incorporating interactive and engaging assessments can help to keep learners motivated and satisfied with their learning experience. Incorporating assessments that challenge

learners' understanding of the course content and allow them to apply what they have learned can improve learners' satisfaction (Huang & Hew, 2016). Interactive and engaging assessments can help keep learners motivated and satisfied with their learning experience (Huang & Hew, 2016). These assessments should go beyond simple multiple-choice questions and provide opportunities for learners to demonstrate their knowledge and skills in practical ways (Huang & Hew, 2016). Motivation is a crucial factor in learner satisfaction. Studies have shown that learners in MOOCs generally have positive motivation levels and are satisfied with the instructional materials provided (Huang & Hew, 2016; Vezne, 2021). Learners' internal motivation to improve themselves, the feeling of freedom during asynchronous courses, not paying for the course, and the opportunity to receive a certificate are some of the main motivators for learners to attend MOOCs (Vezne, 2021).

Additionally, building and sustaining a sense of community among learners can contribute to their satisfaction in the MOOC. Research has shown that a strong sense of community in a MOOC positively influences learner satisfaction, engagement, and retention (Rovai, 2002). Providing opportunities for learners to interact with each other and with the instructor can foster a sense of belonging and engagement, leading to higher satisfaction. In the context of a MOOC, Rovai (2002) also explained that when learners are geographically dispersed and may have limited face-to-face interaction, it is important to leverage technology to facilitate communication and collaboration. The use of online platforms and tools, such as video conferencing, chat rooms, and social media groups, can help bridge the gap and create a virtual community where learners can connect and engage with each other. Hence, the instructors play a crucial role in fostering a sense of community in a MOOC. They can facilitate discussions, provide guidance, and support, and actively participate in the online community. By being present and responsive, instructors can create a supportive and inclusive learning environment that enhances learner satisfaction (Rovai, 2002). Moreover, when learners feel connected to their peers and instructors, they are more likely to be motivated, actively participate in the course, and have a positive learning experience. In addition, learner-instructor interaction and learner-content interaction also contribute to student satisfaction (Khan & Tajamul, 2022). Learner's value the quality of the course structure, course content, and learning implementation (Khan & Tajamul, 2022). However, learner-learner interaction is considered to

have a negligible impact on satisfaction (Khan & Tajamul, 2022). Learners' perspectives and satisfaction should be taken into careful consideration when addressing the quality measurement of MOOCs (Nguyen, 2022).

It is also important to gather feedback from students to assess their satisfaction with the MOOC. This can be done through surveys or interviews to understand their experiences, challenges, and perceived benefits (Yue, 2022). Analysing user comments and feedback can provide valuable insights into learner satisfaction in MOOCs (Ustaoğlu & Kukul, 2022). Through surveys or interviews and analysing user comments and feedback, factors which involve pedagogy (learning objectives, assessment methods, course length, course content, flexibility, and collaborative learning support), resources (the affordances of MOOC platforms, support from the host institution and the platform, and available intellectual and hardware resources) and logistics (the amount of time instructors spend designing the MOOC and addressing issues such as peer assessment and teaching presence in the course) in the MOOC design can provide feedback to assess students' satisfaction with the MOOC (Zhu et al., 2019). Apart from that, Ghaderizefreh & Hoover (2018) conducted a study using Pekrun's control-value theory of achievement emotions to investigate the relationships between characteristics of online learning, students' emotions, and satisfaction with online learning. The study found that well-designed components of online courses can decrease negative emotions and increase student satisfaction. The study also highlighted the importance of understandability, illustration, enthusiasm, and fostering attention in increasing student satisfaction. Another study by Dharmadjaja & Tiatri (2021) examined the influence of characteristics of online learning on students' emotions and satisfaction. The study found that characteristics such as course expectation, difficulty, fast pace, and lack of clarity were related to negative emotions, while understandability, illustration, and fostering attention led to increased student satisfaction. The study also emphasized the role of enjoyment and reduced anger and boredom in increasing student satisfaction with the online learning experience.

In conclusion, to assess student learning satisfaction while using a MOOC in a customer service principles course, it is crucial to consider factors such as the design of the MOOC, technological support, interactive assessments, sense of community, and gathering of feedback from students. By addressing these factors, educators can enhance the learning experience and satisfaction of students in the MOOC.

3. PROPOSED RESEARCH METHODOLOGY

This study proposed to employ a quantitative types of research methodology whereby a survey method will be conducted to investigate the user satisfaction of using MOOCs for Customer Service Principles course. The unit analysis of this research is individual comprising students who are taking the Customer Service Principles (CSM452) course at Universiti Teknologi MARA (UiTM). The targeted population of this study is 400 students pursuing a Bachelor of Customer Service Management degree at the Faculty Business and Management, Universiti Teknologi MARA (UiTM). Based on Krejcie and Morgan's (1970) sample size table, the number of sample size of this study is 196 from a 400 population. The respondents of this study must be experienced in using the MOOC platform for the Customer Service Principles course. In this study, the questionnaire was distributed using simple random sampling technique as the sampling method. The questionnaire is divided into two components: the first consists of general information of the respondents. The items including gender, age, and MOOC platform in use. The second component contains the items to measure perceived usefulness of the MOOC platform for customer service principle and user satisfaction. The 5-point Likert-type of scale was employed with 1 representing a strongly disagree and 5 indicating a strongly agree.

Drawing upon the theory of planned behavior (TPB) and the previous literature, study review to investigated the relationship between perceived usefulness of MOOC platform for customer service principles course towards user satisfaction of MOOC platform. Thus, based on the review of the literature, the conceptual framework of this study was proposed as Fig 1:

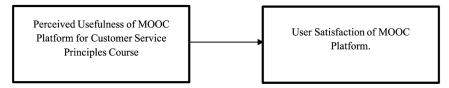


Fig 1: Proposed conceptual framework

Dimension	Description
Perceived Usefulness	1. Using MOOCs would improve my learning Performance for
of MOOC Platform	Customer Service Principles Course.
for Customer Service	2. Using MOOCs would increase my learning efficiency of Custom
Principles Course	Service Principles Course.
	3. Using MOOCs would be useful for me to understand the Custom
	Service Principles Course.
	4. Using MOOCs would be enhancing my thinking skill regarding t
	Customer Service Principles Course.
	5. Using MOOCs would be easier for me to understand the Custom
	Service Principles Course.
User Satisfaction of	1. I am satisfied with MOOCs.
MOOC Platform.	2. I enjoyed learning the Customer Service Principles Course through
	MOOCs.
	3. I am absolutely delighted using MOOCs platform for Customer
	Service Principles Course.
	4. Overall, my experience with MOOCs has been positive.

Table 1. Measurement of the construct in the study

4. CONCLUSION

In conclusion, a customer service principles course is not just a training exercise; it's an investment in creating a customer-centric culture that fosters customer loyalty, brand reputation, and overall business success. It equips individuals with the skills and mindset needed to provide exceptional service across various touchpoints and situations. Ultimately, by having Customer Service Principles (CSM452) MOOC platform offers a dynamic and accessible learning experience that focuses on practical skills, personalized learning pathways, and interactive engagement. The MOOC platform is a valuable resource for individuals seeking to enhance their customer service knowledge and skills, ultimately leading to improved customer experiences and professional growth.

5. ACKNOWLEDGEMENTS

The authors would like to thank to the Universiti Teknologi MARA (UiTM) for the financial contribution and sponsorship given through the Faculty of Business and Management for this research, and also to those who directly and indirectly contributed towards it.

6. **REFERENCES**

- Albelbisi, N. A., AL-ADWAN, A. S., & Habibi, A. (2023). A qualitative analysis of the factors influencing the adoption of mooc in higher education. Turkish Online Journal of Distance Education, 24(2), 217-231.
- Alturki, U., & Aldraiweesh, A. (2023). An Empirical Investigation into Students' Actual Use of MOOCs in Saudi Arabia Higher Education. Sustainability, 15(8), 6918.
- Business Queensland (2003). Improving your customer service. Retrieved from https://www.business.qld.gov.au/.
- Cagiltay, N. E., Toker, S., & Cagiltay, K. (2023). Exploring the Influence of Countries' Economic Conditions on Massive Open Online Course (MOOC) Participation: A Study of 3.5 Million MITx Learners. International Review of Research in Open and Distributed Learning, 24(2), 1-17.
- Customer Service Principles (CSM452). UiTM Curriculum Management. Retrieved August 29, 2023, from https://aims.uitm.edu.my/curriculum/ AIMS. (2023)
- Daneji, A. A., Ayub, A. F. M., & Khambari, M. N. M. (2019). The effects of perceived usefulness, confirmation and satisfaction on continuance intention in using massive open online course (MOOC). Knowledge Management & E-Learning, 11(2), 201-214.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. Management Science, 35(8), 982-1003. http://dx.doi.org/10.1287/ mnsc.35.8.982.
- Dharmadjaja, P. N. and Tiatri, S. (2021). The effect of online interaction types and acceptance of technology factors on student satisfaction with online learning during the covid-19 pandemic. Advances in Social Science, Education and Humanities Research. https://doi.org/10.2991/ assehr.k.210805.148
- Firdaus, I., & Surarso, B. (2020). Application of fuzzy Servqual method to measure user satisfaction of Mooc service quality. In E3S Web of Conferences (Vol. 202, p. 14007). EDP Sciences.
- Freeze, R. D., K. A. Alshare, P. L. Lane and H. J. Wen. "IS success model in e-learning context based on students' perceptions," Journal of Information Systems Education, Vol.21, N0.2: 173-184. 2010.

- Harris, E. K. (2014). Customer Service: A Practical Approach. (6th ed.). Pearson.
- Hendriks, R.A.; de Jong Admiraal, W.F.; Reinders, M.E. (2020). Instructional design quality in medical massive open online courses for integration into campus education. Med. Teach. 2020, 42, 156–163.
- Hou, M. L. (2016). Data mining and application in MOOC discussion forum[D]. Unpublished master thesis, Shandong University, Jinan, China. (in Chinese).
- Huang, B. and Hew, K. F. (2016). Measuring learners' motivation level in massive open online courses. International Journal of Information and Education Technology, 6(10), 759-764. https://doi.org/10.7763/ ijiet.2016.v6.788.
- Kaplan, A.M.; Haenlein, M. Higher education and the digital revolution: About MOOCs, SPOCs, social media, and the Cookie Monster. Bus. Horiz. 2016, 59, 441–450.
- Khan, M. and Tajamul, I. (2022). A study on the determinants of learner satisfaction in MOOCS. Cardiometry, (23), 538-544. https://doi. org/10.18137/cardiometry.2022.23.538544
- Li, J., Li, L., Zhu, Z., & Shadiev, R. (2023). Research on the predictive model based on the depth of problem-solving discussion in MOOC forum. Education and Information Technologies, 1-24.
- Limayem, M. and C. M. K. Cheung. "Predicting the continued use of Internet-based learning technologies: the role of habit," Behaviour & Information Technology, Vol.3, No.1: 91-99. 2011.
- Lu, Y., Wang, B., & Lu, Y. (2019). Understanding key drivers of MOOC satisfaction and continuance intention to use. Journal of Electronic Commerce Research, 20(2).
- Mansor, F., Latifah, A. L., & Amina, M. (2015). MOOCs in Malaysia: a preliminary case study. Paper presented at E-ASEM Forum: Renewing the Lifelong Learning Agenda for The Future. Bali, Indonesia.
- Ministry of Education Malaysia (2015). Executive summary: Malaysia Education Blueprint 2015-2025 (Higher Education). Retrieved from https://www.mohe.gov.my.
- Najafi, H., Rolheiser, C., Harrison, L., & Håklev, S. (2015). University of Toronto instructors' experiences with developing MOOCs. International Review of Research in Open and Distributed Learning, 16(3), 233-255.

- Nguyen, L. Q. (2022). Learners' satisfaction of courses on coursera as a massive open online course platform: a case study. Frontiers in Education, 7. https://doi.org/10.3389/feduc.2022.1086170
- Nong, Y., Buavaraporn, N., & Punnakitikashem, P. (2022). Exploring the factors influencing users' satisfaction and continuance intention of MOOCs in China. Kasetsart Journal of Social Sciences, 43(2), 403-408.
- Pérez-Sanagustín, M., Hilliger, I., Alario-Hoyos, C., Kloos, C. D., & Rayyan, S. (2017). H-MOOC framework: reusing MOOCs for hybrid education. Journal of Computing in Higher Education, 29, 47-64.
- Rezvani, S., Heidari, S., Roustapisheh, N., & Dokhanian, S. (2022). The effectiveness of system quality, habit, and effort expectation on library application use intention: the mediating role of perceived usefulness, perceived ease of use, and user satisfaction. International Journal of Business Information Systems, 1(1), 1.
- Rovai, A. P. (2002). Building sense of community at a distance. The International Review of Research in Open and Distributed Learning, 3(1). https://doi.org/10.19173/irrodl.v3i1.79
- Shah, D., Pickard, L., & Ma, R. (2022). Massive list of MOOC platforms around the world in 2023. https://www.classcentral.com/report/moocplatforms
- Shah, V., Murthy, S., & Iyer, S. (2023). Is My MOOC Learner-Centric? A Framework for Formative Evaluation of MOOC Pedagogy. International Review of Research in Open and Distributed Learning, 24(2), 138-161.
- Sun, M.; Xiong, L.; Li, L.; Chen, Y.; Tang, J.; Hua, W.; Mao, Y. (2021). Digital Divide in Online Education During the COVID-19 Pandemic: A Cosmetic Course From the View of the Regional Socioeconomic Distribution. Front. Public Health 2021, 9, 796210.
- Tao, X., Shannon-Honson, A., Delaney, P., Dann, C., Xie, H., Li, Y., & O'Neill, S. (2023). Towards an understanding of the engagement and emotional behaviour of MOOC students using sentiment and semantic features. Computers and Education: Artificial Intelligence, 4, 100116.
- Ustaoğlu, M. A. and Kukul, V. (2022). Gaining an insight into learner satisfaction in moocs: an investigation through blog mining. Open Praxis, 14(3), 230-241. https://doi.org/10.55982/openpraxis.14.3.490

- Vezne, R. (2021). Teacher candidates' satisfaction with massive open online courses in turkey. Cypriot Journal of Educational Sciences, 15(3), 479-491. https://doi.org/10.18844/cjes.v15i3.4914
- Wan, L., Xie, S., & Shu, A. (2020). Toward an understanding of university students' continued intention to use MOOCs: When UTAUT model meets TTF model. Sage Open, 10(3).
- Wei, W., Yu, Y., & Gao, G. (2022). Investigating learners' changing expectations on learning experience in a mooc of professional translation and interpreter training. SAGE Open, 12(4), 215824402211345. https://doi.org/10.1177/21582440221134577
- Yue, N. W. S. (2022). Exploring mooc as a new instructional technology tool: the relationship of students' challenges, perceived benefits, and satisfaction. Journal of Advanced Research in Applied Sciences and Engineering Technology, 28(1), 126-138. https://doi.org/10.37934/ araset.28.1.126138
- Zahrani, A.A. (2021) Exploring behaviour control and actual use of Massive Open Online Courses system management for education sustainability. Entrep. Sustain. Issues 2021, 9, 386.
- Zalli, M. M. M., Nordin, H., & Hashim, R. A. (2019). The role of selfregulated learning Strategies on learners' satisfaction in Massive Open Online Course (MOOC): Evidence from Malaysia MOOC. International Journal of Innovative Technology and Exploring Engineering, 8(10), 2286-2290.
- Zhu, M., Bonk, C. J., & Sari, A. R. (2019). Instructors' experience of designing moocs in higher education: considerations and challenges. Online Learning, 22(4). https://doi.org/10.24059/olj.v22i4.1495