

# Investigating Hospitality Student's Acceptance in Online Learning Platform: Utilising UTAUT Model

Muhammad Fahmi Md Sabri, Noradzhar Baba, Wan Ahmad  
Nasroun Wan Sulaiman

Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, 42300 Puncak Alam,  
Selangor, Malaysia

Corresponding Author Email: [noradzhar@uitm.edu.my](mailto:noradzhar@uitm.edu.my)

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v13-i5/17047> DOI:10.6007/IJARBSS/v13-i5/17047

**Published Date:** 05 May 2023

## Abstract

This conceptual paper aims to investigate the relationship between hospitality students' acceptance of using online learning platforms during the pandemic of COVID-19 by utilizing the UTAUT Model. The spreading of COVID-19 has altered the landscape of world education, including the higher education system in Malaysia. All traditional classes need to be switched to online learning activities to ensure the spreading of this virus can be retained. Additionally, this enormous online movement has also allowed many educators to reconsider the purpose of education and their relationships with students. Furthermore, limited studies have investigated the challenges surrounding student acceptance and adoption of such systems and their consequences for teaching and learning, particularly among students in the hospitality and tourism fields. UTAUT is the most adopted model in investigating user acceptance of online technology, which in this conceptual paper focuses on hospitality students' online learning. The UTAUT model was adopted and modified to fit the proposed research framework by incorporating all dimensions acting as the variable. Five theoretical propositions are suggested in the literature review. This study is added to the literature on digital technology and application adoption in hospitality students' online learning environments.

**Keywords:** Online Learning, Online Learning Platform, COVID-19, UTAUT, Microsoft Teams

## Introduction

At the end of 2019, the Corona Virus outbreak hit all types of industries worldwide, and WHO designated SARS-Cov-2 in March 2020. There have been over 1 million deaths worldwide (WHO, 2020). Many industries globally cannot manage the pandemic's effects. One hundred twenty countries have abandoned face-to-face studying. COVID-19 affects 1 billion pupils worldwide. Higher education dominates online learning (Shahzad et al., 2020). As an emergency effort to avert the COVID-19 pandemic, practically every government has urged public schools and higher education institutions to close. Fear of illness and casualties have

impacted Malaysia's higher education scene, including the Hospitality Education Department at the Malaysian Polytechnics.

The spread of this virus and the pandemic, in general, have altered the world of education. Online classes have supplanted face-to-face activities. Education must move online. It changed one of the unwritten school regulations that all students must be in one place to learn. Traditional learning environments have been classrooms and classes. Online activism, then, has changed the norm. It has forced professors and educators to conduct lectures remotely, without face-to-face contact. Many educators have rethought the purpose of education and their connections with students (Zhao & Watterston, 2021). Less active students may miss messages to keep them on track because online activities are not part of scheduled class time (Davis et al., 2019). In this sense, online learning can lead to student isolation and monotony without classroom dynamics. This gap may worsen if teachers do not use technology to build student relationships (Lee et al., 2016). During this time, Polytechnic hospitality students had trouble studying. Many scholars say that online education is a digital revolution and educational breakthrough (Dwivedi et al., 2011, 2019). Individualised, computerised, enjoyable, integrated, visual, and game-based learning is common today (Bonk, 2016). The success of online learning depends on how it influences all fields of knowledge and education (Al Mulhem, 2020). Online learning in developing nations like Malaysia broadens the horizons of quality content, boosts teaching and learning standards, reduces delivery costs, and increases networking and collaboration among Malaysian academics worldwide. Malaysia's higher education system must shift from conventional teaching methods to technology-enabled innovation to deliver and customise education for all students, according to the Malaysia Higher Education Blueprint 2015-2025.

UTAUT has also been used to examine ICT applications in mobile banking (Zhou et al., 2010), mobile phone technologies (Zhou, 2011), Internet banking (Unrau & Schlackman, 2010; Riffai et al., 2012), e-government (Schaupp et al., 2010), e-recruitment (Laumer et al., 2010), and virtual learning technologies (Liu & Wang, 2009; Zhou et al., 2010). Various studies have examined the barriers to digital learning adoption globally. Abbad (2021) studied Jordanian students' use of e-learning. Performance expectation, effort expectation, behavioural intention, and facilitating condition affected online learning acceptability among students but not social influence (SI). Numerous studies have used this UTAUT theoretical framework; however, studies related to online hospitality education are currently insufficient; therefore, more study is needed. First, few studies have examined student acceptance and adoption of such systems and their teaching and learning outcomes, especially among hospitality and tourism students (Gorissen et al., 2012). Next, few studies focused on online learning systems like Microsoft Teams in Polytechnic's hospitality online education. A study like this could assist Malaysian Polytechnics in exploring online hospitality education.

The structure of this paper does include a literature review on online learning during Covid-19 in Malaysia's Higher Education System, focusing on hospitality students in Polytechnic, the online learning platform used as the medium in conveying online classes, and the construct in UTAUT, which relates to this proposed concept paper. The final section covers the study's conceptual framework and conclusions.

## **Literature Review**

### **Online Learning During COVID-19 Pandemic**

The COVID-19 pandemic has disrupted education systems internationally, affecting 1.5 billion children and youth (UNESCO). Governments, schools, and education systems offer remote

learning and instruction with minimal planning, preparation, and digital skills (Kamanetz 2020). Next, conventional assessments and high-stakes testing were abandoned, and education was allowed to adapt quickly (Zhao & Watterston, 2021).

Malaysia had 6,002 COVID-19 cases by April 30th, 2020 (Hashim et al., 2020). In response to COVID-19 infections, Malaysia issued a Movement Control Order on March 18th, 2020 (New Straits Times 2020). The Movement Control Order requires all colleges and universities to implement e-learning by December 31st, 2020 (Palansamy, 2020). Asynchronous and synchronous IT technologies and infrastructure assist higher education (Larasati & Santoso, 2018). Asynchronous learning systems don't require time-sensitive interactions from educational stakeholders (Larasati & Santoso, 2018). Students in synchronous learning environments attend live lectures, participate in real-time, and receive fast feedback. However, asynchronous learning environments lack organisation.

Learning content for e-learning is accessible through many platforms and forums than living lectures or courses. This prevents immediate input and response (Littlefield, 2018). Synchronous learning promotes social opportunities (McBrien et al., 2009). Online platforms where (a) video conferencing with at least 40 to 50 students is possible, (b) discussions with students can be held to keep classes organic, (c) internet connections are good, (d) lectures are accessible on mobile phones as well as laptops, (e) previously recorded lectures can be viewed, and (f) instant student feedback and assignments can be taken are required (Basilaia et al., 2020). Online learning platforms promote instruction, resource exchange, and simultaneous teacher-student collaboration (Zacharis & Nikolopoulou, 2022). They offer synchronous and asynchronous instruction, allowing teachers to engage with students and deliver lessons (Sayeh & Razkane, 2021).

### **Microsoft Teams as an Online Learning Platform**

Zoom and Microsoft Teams are popular video-conferencing tools in Malaysia (Birruntha, 2020). During the COVID-19 outbreak, JPPKK ensured that teaching and learning proceeded in 36 Polytechnics and 104 Community Colleges. Jabatan Pengajian Politeknik dan Kolej Komuniti (JPPKK) proposes the Microsoft Teams Platform as an online learning platform for merging online classrooms and evaluations. As part of Microsoft Office 365's communication platform, Microsoft Teams was utilised in commercial, hybrid, and online courses (Buchal & Songsore, 2019; Ly et al., 2021). Meetings, video conferencing, and file storage are included. Microsoft Team members can build and operate virtual courses like real classrooms, allowing students to connect with peers and teachers. Online class sessions, discussions, publications, and evaluations can facilitate this relationship (Bsharat & Behak, 2020; Ly et al., 2021; Pal & Vanijja, 2020). Microsoft Teams allows students and teachers to communicate online uniquely (Pal & Vanijja, 2020; Bsharat & Behak, 2021).

Microsoft Teams is useless for lab classes and giving long essay responses (Nguyen et al., 2021). Microsoft Teams' downsides include a lack of connection between students and teachers, leading to social isolation, mental challenges, negative thinking, and a lack of self-motivation and poor time management (Latip et al., 2020). Microsoft Teams clients may have limited internet access, invisible images, and unclear audio (Rojabi et al., 2020). It can be considered that Microsoft Teams' acceptability as an online learning tool in higher education is still at its early stage, to say at least.

**Unified Theory of Acceptance and Use of Technology (UTAUT)**

Venkatesh et al (2003) created the UTAUT paradigm, which has four parts (performance expectancy, effort expectancy, social factors, and facilitating conditions). Performance expectation is how much a person (in this scenario, a student) believes technology will help them achieve academic goals at a typical university. The study found that performance expectation is the model's most influential

dimension (Venkatesh et al., 2003). Adjusting performance expectations suggests students will view Microsoft Team as a positive online learning environment. Effort expectation is a system's ease of use, and an effort-oriented construct is prominent at the beginning of a new habit (Venkatesh, 2003 & 2012).

Applying effort expectations to this study's setting simplifies Microsoft Team's online education deployment. This term refers to how one's behaviour is influenced by how they perceive others who will view them due to technology use. Social influence is how much a person considers prominent people to support the new system. Venkatesh (2003) mentioned that social components are more important in classrooms. Facilitating conditions refer to how much an individual believes a system's organisational and technological infrastructure exists (Akbar, 2013). These four features determine whether students choose Microsoft Team as their online learning platform. Applying effort expectations to this study's setting simplifies Microsoft Team's online education deployment. This term refers to how one's behaviour is influenced by how they perceive others who will view them due to technology use. Social influence is how much a person considers prominent people to support the new system. Venkatesh (2003) says social components are more essential in classrooms.

**Performance Expectancy (PE)**

Performance expectancy (PE) is a person's view of technology's usefulness (Venkatesh et al., 2003, Ain et al., 2016). In analysing student acceptance of online learning platforms, effectiveness for studying is considered (Decman, 2015). Lwoga and Komba (2015) characterise the level at which pupils realise the system's classroom benefits. Thus, consumers would adopt the technology if it improved efficiency. Online learning students will use technology for instruction. Several researchers evaluated the effects of a technology's Performance Expectancy (PE) on behavioural intention to utilise it in voluntary and mandatory situations and found a direct effect (Casey & Wilson-Evered, 2012; Dwivedi et al., 2011; Gupta et al., 2008; Sumak et al., 2011; Venkatesh et al., 2003; Zhou et al., 2010). Sumak et al. (2010) found that performance expectation positively affects online learning behaviour intention. The literature demonstrates that students will use online learning if they believe it will improve their performance. As a result of the review, the authors present the following proposition:

*Proposition 1: Performance Expectancy (PE) positively affects behaviour intention (BI)*

**Effort Expectancy (EE)**

In the study, Yoo et al. (2012) discovered that Effort Expectancy (EE) is the most influential component. The user-friendliness of technology is how much labour a person perceives to put into using it (Decman, 2015). Researchers study early technology uptake and effort expectations. Gupta et al (2008); Venkatesh et al (2003) found it directly affected Behavior Intention (BI), although Venkatesh (2000) demonstrated it became minor over time. However, Gruzd et al (2012) found a negative connection. Raman & Don (2013) concur that the link

between Effort Expectation and Behavior Intention is good. A small effort to employ online learning led to a better Behavior Intention (BI). As a result of the comparison, the authors have the following proposition:

*Proposition 2: Effort Expectancy (EE) positively affects behaviour intention (BI)*

### **Social Influence (SI)**

Social Influence (SI) is peer reflection. Technology impacts instructors' and friends' evaluations of social intents (Venkatesh et al., 2003). SI measures a student's social acceptance of online learning. Online learning influences Behaviour Intention (BI). As technology and social networking services have advanced, the emphasis has shifted from real to virtual (Decman, 2015). Scientists found a relationship between Social influence (SI) and behaviour intention (BI) of attitudes toward technology use in voluntary and involuntary situations on necessary conditions (Gruzd et al., 2012; Gupta et al., 2008; Venkatesh et al., 2012; Venkatesh et al., 2003). Social pressure encouraged employees to use e-government services (Al-Shahrani, 2016). Fidani & Idrizi (2012) discovered that investigating elements that affect online learning platforms to social influence affects students' Behavior Intention (BI) to use the platform. The authors provide the third proposition in the review:

*Proposition 3: Social Influence (SI) positively affects behaviour intention (BI)*

### **Facilitating Condition (FC)**

Facilitating Conditions (FC) is the availability of necessary help and resources for using technology. It also focuses on technical and organisational infrastructure for online learning. Education, technical aid, and infrastructure are needed (Decman, 2015). The initial UTAUT model found that FC had a direct but modest impact on BI (Venkatesh et al., 2003). Dwivedi et al. (2011) found that the link between Facilitating Condition (FC) conditions and Behavioural Intention (BI) was the weakest. Moreover, the study indicated that restricted resources hinder pupils' acceptance of web-based technology. They rely on teachers' and technological support to positively affect their use of online learning platforms (Abdullah et al., 2020; Pal & Vanijja, 2020b; Zhang & Qin, 2018). (Ain et al., 2016). Moreover, allowing conditions can affect online learning acceptability (Toquero, 2020). It implies students' views of enabling environments predict their online learning behaviour intention (BI). Therefore the authors provide the fourth proposition based on the review.

*Proposition 4: Facilitating Condition (FC) positively affects behaviour intention (BI)*

### **Behavioural Intention (BI)**

BI is a person's purpose of using technology for numerous tasks (Kim et al., 2021). Moreover, Kim et al (2020) defined Behavior Intention (BI) as the student's desire to undertake online learning to accomplish course objectives. Researchers have found a direct correlation between BI and technology use (Davis, 1989; Raman & Don, 2013; Wang & Wang, 2009). Furthermore, the study also found that students' Behaviour Intention (BI) in adopting an e-learning system positively corresponds to their user behaviour, leading to better grades. An individual's technology usage is called usage behaviour (Bagozzi, 1981). The authors of this study predict a positive association between online learning behavioural intention and use. The authors conclude the review with the fifth proposition:

Proposition 5: *Behaviour Intention (BI) influences the use of behaviour (UB) online learning platform*

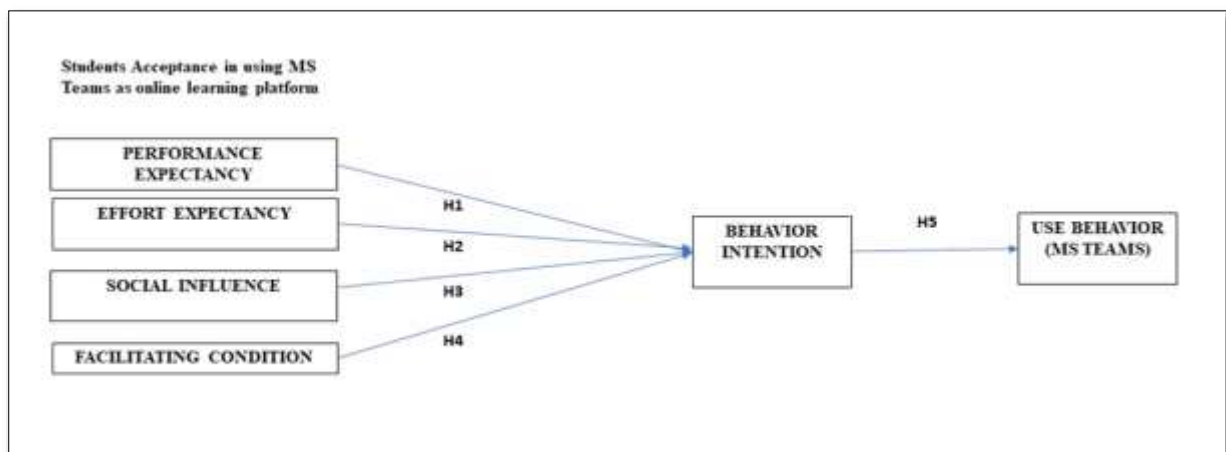
### Proposed Conceptual Framework

A conceptual framework is based on the aforementioned arguments and propositions. The framework comprises five dimensions of Venkatesh (2003) UTAUT, suggested by previous literature and past studies. The hypotheses relationship between the five dimensions of student's acceptance of online learning platforms is developed based on the propositions by the proceeding researchers. Thus the conceptual framework is presented in Figure 1.

The selected paradigms and study setting suggest a quantitative approach. This study will use cross-sectional research to examine predictor-variable relationships.

Figure 1: Proposed Conceptual Framework

### Conclusion



This investigation will develop and test a model of UTAUT's influence on hospitality students' acceptance of online learning platforms during the COVID-19 pandemic and makes substantial theoretical and managerial breakthroughs by addressing critical gaps in the existing research.

### Academic Contribution

This research contributes to the existing body of knowledge on hospitality students' technological acceptance of online learning platforms. It also provides the Jabatan Pendidikan Politeknik dan Kolej Komuniti (JPPKK) with further theoretical knowledge regarding the use of Microsoft Teams as an online learning platform. In addition, this study will aid practitioners and policymakers in acquiring a better and more comprehensive understanding of the elements influencing hospitality students' acceptance and use of Microsoft Teams as their online learning platform. At the same time, it gives sufficient evidence for stakeholders to determine the efficacy of teaching and learning systems in Malaysian Higher Education. Finally, the study will contribute to the literature on hospitality online education, as little research has been undertaken on the online learning activities of hospitality students in Malaysia.

### Practical Contribution

This study could aid the Department of Tourism and Hospitality at Malaysian Polytechnics in determining the efficacy of Microsoft Teams as an online learning platform for their teaching and learning process. The study provides direct information on the acceptability of Microsoft Teams among Department of Tourism and Hospitality students as an online learning platform. Therefore, the study will investigate how the UTAUT variables influence the adoption of this online learning platform, thereby encouraging students to participate actively in online classes. The collected data also will be useful for the department in developing strategies for continuous improvement to enhance the lecturers' delivery methods, enhancing the student's interest and intent to continue using Microsoft Teams as an online learning platform at Malaysian Polytechnics. It also contributes to improving the online learning experience for students. In addition, it aids the organisation in designing a strategic training strategy to enhance the lecturers' online teaching skills.

### References

- Abbad, M. M. M. (2021). Using the UTAUT model to understand students' usage of e-learning systems in developing countries. *Education and Information Technologies*, 0123456789. <https://doi.org/10.1007/s10639-021-10573-5>
- Abdullah, M., Husin, N. A., & Haider, A. (2020). Development of Post-Pandemic Covid19 Higher Education Resilience Framework in Malaysia. *Archives of Business Research*, 8(5), 201–210. <https://doi.org/10.14738/abr.85.8321>
- Ain, N., Kaur, K., & Waheed, M. (2016). The influence of learning value on learning management system use: An extension of UTAUT2. *Information Development*, 32(5), 1306–1321. <https://doi.org/10.1177/0266666915597546>
- Akbar, F. (2013). What affects students' acceptance and use of technology? A test of UTAUT in the context of a higher-education institution in Qatar. *Dietrich College of Humanities and Social Sciences at Research Showcase @ CMU*, 33.
- Al Mulhem, A. (2020). Exploring the Key Factors in the Use of an E-Learning System Among Students at King Faisal University, Saudi Arabia. *International Journal of Interactive Mobile Technologies (IJIM)*, 14(03), 19. <https://doi.org/10.3991/ijim.v14i03.11576>
- Al-Shahrani. (2016). Investigating the determinants of mobile learning acceptance in higher education in Saudi Arabia.
- Basilaia, G., Dgebuadze, M., Kantaria, M., & Chokhnelidze, G. (2020). Replacing the classic learning form at universities as an immediate response to the COVID-19 virus infection in Georgia. *International Journal for Research in Applied Science & Engineering Technology*, 8(III).
- Birruntha. (2020). Zoom, Microsoft Teams most popular tools for remote workers <https://themalaysianreserve.com/2020/03/23/zoom-microsoft-teams-most-popular-tools-forremoteworkers/#:~:text=%E2%80%9CThe%20most%20popular%20tools%20among,among%20businesses%20is%20Google%20Hangouts.>
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94. <https://doi.org/10.1007/BF02723327>
- Bonk, C. (2016). Keynote: What is the State of E-Learning? Reflections on 30 Ways Learning is Changing. *Journal of Open Flexible and Distance Learning*, 20(2), 6–20.

- Bsharat, T. R. K., & Behak, F. (2020). The Impact of Microsoft Teams' App in Enhancing Teaching-Learning English during the Coronavirus (COVID-19) from the English teachers' perspectives' in Jenin city (Vol. 7).
- Buchal, R., & Songsore, E. (2019). Using Microsoft Teams To Support Collaborative Knowledge Building in the Context of Sustainability Assessment. Proceedings of the Canadian Engineering Education Association (CEEA), 1–8.  
<https://doi.org/10.24908/pceea.vi0.13882>
- Casey, T., & Wilson-Evered, E. (2012). Predicting uptake of technology innovations in online family dispute resolution services: An application and extension of the UTAUT. *Computers in Human Behavior*, 28(6), 2034–2045.  
<https://doi.org/10.1016/j.chb.2012.05.022>
- Davis, N. L., Gough, M., & Taylor, L. L. (2019). Online teaching: advantages, obstacles and tools for getting it right. *Journal of Teaching in Travel and Tourism*, 19(3), 256–263.  
<https://doi.org/10.1080/15313220.2019.1612313>
- Decman, M. (2015). Modeling the acceptance of e-learning in mandatory environments of higher education: The influence of previous education and gender. *Computers in Human Behavior*, 49, 272–281. <https://doi.org/10.1016/J.CHB.2015.03.022>
- Dwivedi, Y. K., Rana, N. P., Chen, H., & Williams, M. D. (2011). A meta-analysis of the unified theory of acceptance and use of technology (UTAUT). *IFIP Advances in Information and Communication Technology*, 366, 155–170. [https://doi.org/10.1007/978-3-642-24148-2\\_10](https://doi.org/10.1007/978-3-642-24148-2_10)
- Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., & Williams, M. D. (2019). Re-examining the Unified Theory of Acceptance and Use of Technology (UTAUT): Towards a Revised Theoretical Model. *Information Systems Frontiers*, 21(3), 719–734.  
<https://doi.org/10.1007/s10796-017-9774-y>
- Fidani, A., and Idrizi, F. (2012) 'Investigating students' acceptance of a learning management system in university education: a structural equation modeling approach', *ICT Innovations2012, Web Proceedings ISSN 1857-7288*, 311.
- Gorissen, P., Van Bruggen, J., & Jochems, W. (2012). Students and recorded lectures: Survey on current use and demands for higher education. *Research in Learning Technology*, 20(3), 297–311. <https://doi.org/10.3402/rlt.v20i0.17299>
- Gruzd, A., Staves, K., & Wilk, A. (2012). Connected scholars: Examining the role of social media in research practices of faculty using the UTAUT model. *Computers in Human Behavior*, 28(6), 2340–2350. <https://doi.org/10.1016/j.chb.2012.07.004>
- Gupta, Y., Khan, F. M., & Agarwal, S. (2021). Exploring Factors Influencing Mobile Learning in Higher Education - A Systematic Review. *International Journal of Interactive Mobile Technologies*, 15(12), 140–157. <https://doi.org/10.3991/ijim.v15i12.22503>
- Hashim, J. H., Adman, M. A., Hashim, Z., Radi, M. F., and Kwan, S. C. (2020). COVID-19 Epidemic in Malaysia: Epidemic Progression, Challenges, and Response. *Front. Public Health* 9:560592. doi: 10.3389/fpubh.2021.560592
- JPPKK. (2022). *Jabatan Pendidikan Politeknik dan Kolej Komuniti - Utama*. <https://www.mypolycc.edu.my/>
- Kamanetz, A. (2020). 'Panic-gogy': Teaching Online Classes During The Coronavirus Pandemic. NPR. Retrieved from <https://www.npr.org/2020/03/19/817885991/panic-gogy-teaching-online-classesduring-the-coronavirus-pandemic>
- Kim, E. J., Kim, J. J., & Han, S. H. (2021). Understanding student acceptance of online learning systems in higher education: Application of social psychology theories with



- consideration of user innovativeness. *Sustainability (Switzerland)*, 13(2), 1–14.  
<https://doi.org/10.3390/su13020896>
- Larasati, P. F., & Santoso, H. B. (2018). Interaction Design Evaluation and Improvements of Cozora - A Synchronous and Asynchronous Online Learning Application. *Proceedings - 2017 7th World Engineering Education Forum, WEEF 2017- In Conjunction with: 7th Regional Conference on Engineering Education and Research in Higher Education 2017, RCEE and RHEd 2017, 1st International STEAM Education Conference, STEAMEC 201*, 536–541. <https://doi.org/10.1109/WEEF.2017.8467168>
- Latip, M. S. A., Noh, I., Tamrin, M., & Latip, S. N. N. A. (2020). Students' acceptance for e-Learning and the Effects of Self-Efficacy in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 10(5). <https://doi.org/10.6007/ijarbss/v10-i5/7239>
- Laumer, S., Eckhardt, A., & Weitzel, T. (2010). Electronic Human Resources Management in an E-Business Environment. *Journal of Electronic Commerce Research*, 11(4), 240–250.
- Lee, P. C., Sun, S., Law, R., & Lee, A. H. (2016). Educational technology in hospitality management programs: adoption and expectations. *Journal of Teaching in Travel and Tourism*, 16(2), 116–142. <https://doi.org/10.1080/15313220.2015.1121795>
- Littlefield, J. (2018). The difference between synchronous and asynchronous distance learning.  
<https://www.thoughtco.com/synchronous-distance-learning-asynchronousdistance-learning-1097959>
- Liu, Y., & Wang, H. (2009). A comparative study on e-learning technologies and products: From the east to the west. *Systems Research and Behavioral Science*, 26(2), 191–209.  
<https://doi.org/10.1002/sres.959>
- Lwoga, E. T., & Komba, M. (2015). Antecedents of continued usage intentions of webbased learning management system in Tanzania. *Education Training*, 57, 738–756.  
<https://doi.org/10.1108/ET-02-2014-0014>
- Ly, T., Duong, N., Huyen, N., & Nguyen, U. (2021). The Challenges of E-learning Through Microsoft Teams for EFL Students at Van Lang University in COVID-19 (Vol. 12, Issue 4).  
[https://asiacall.info/acojMalaysia\\_Higher\\_Education\\_Blueprint\\_2015-2025](https://asiacall.info/acojMalaysia_Higher_Education_Blueprint_2015-2025).  
<https://www.um.edu.my/docs/um-magazine/4-executive-summary-pppm-2015-2025.pdf>.
- McBrien, J. L., Cheng, R., & Jones, P. (2009). Virtual spaces: Employing a synchronous online classroom to facilitate student engagement in online learning. *The International Review of Research in Open and Distributed Learning*, 10(3), 1–17.
- News Straits Times. (2020). 14-day Movement Control Order begins nationwide on Wednesday.  
<https://www.nst.com.my/news/nation/2020/03/575180/14-day-movement-control-order-begins-nationwide-wednesday>
- Nguyen, I.-I., & Chu, H. T. (2021). Estimating University Students' Acceptance of Technological Tools for Studying English through the UTAUT Model. *International Journal of TESOL & Education*, 1(3), 209–234.
- Palansamy (2020). Higher Education Ministry: All university lectures to be online-only until end 2020, with a few exceptions.  
<https://www.malaymail.com/news/malaysia/2020/05/27/higher-education-ministry-all-university-lectures-to-be-online-only-until-e/1869975>

- Pal, D., & Vanijja, V. (2020a). Perceived usability evaluation of Microsoft Teams as an online learning platform during COVID-19 using system usability scale and technology acceptance model in India. *Children and Youth Services Review*, 119, 105535. <https://doi.org/10.1016/j.childyouth.2020.105535>
- Pal, D., & Vanijja, V. (2020b). Perceived usability evaluation of Microsoft Teams as an online learning platform during COVID-19 using system usability scale and technology acceptance model in India. *Children and Youth Services Review*, 119. <https://doi.org/10.1016/j.childyouth.2020.105535>
- Raman, A., & Don, Y. (2013). Preservice teachers' acceptance of learning management software: An application of the UTAUT2 model. *International Education Studies*, 6(7), 157–164.
- Riffai, M. M. M. A., Grant, K., & Edgar, D. (2012). Big TAM in Oman: Exploring the promise of online banking, its adoption by customers and the challenges of banking in Oman. *International Journal of Information Management*, 32(3), 239–250. <https://doi.org/10.1016/J.IJINFOMGT.2011.11.007>
- Rojabi, A. R. (2020). Exploring EFL Students' Perception of Online Learning via Microsoft Teams: University Level in Indonesia. *English Language Teaching Educational Journal*, 3(2), 163. <https://doi.org/10.12928/eltej.v3i2.2349>
- Sayeh, A. Y., & Razkane, H. (2021). Moroccan High School EFL Teachers' Attitudes and Anxiety on Using Microsoft Teams Platform. *TESOL and Technology Studies*, 2(2), 29–40. <https://doi.org/10.48185/tts.v2i2.267>
- Schaupp, L. C., Carter, L., & McBride, M. E. (2010). E-file adoption: A study of U.S. taxpayers' intentions. *Computers in Human Behavior*, 26(4), 636–644. <https://doi.org/10.1016/J.CHB.2009.12.017>
- Shahzad, A., Hassan, R., Aremu, A. Y., Hussain, A., & Lodhi, R. N. (2021). Effects of COVID-19 in E-learning on higher education institution students: the group comparison between male and female. *Quality and Quantity*, 55(3), 805–826. <https://doi.org/10.1007/s11135-020-01028-z>
- Sumak, B., Heri cKo, M., & Pu sNik, M. (2011). A meta-analysis of e-learning technology acceptance: The role of user types and e-learning technology types. *Computers in Human Behavior*, 27(6), 2067–2077. <https://doi.org/10.1016/j.chb.2011.08.005>
- Toquero, C. M. (2020). Challenges and Opportunities for Higher Education amid the COVID-19 Pandemic: The Philippine Context. *Pedagogical Research*, 5(4), em0063. <https://doi.org/10.29333/pr/7947>
- UNESCO. (2020). Alternative solution to school closure in Arab countries to ensure that learning never stops. Covid-19. Building Peace in the Minds of Men and Women. Unesco.
- Unrau, N., & Schlackman, J. (2010). Factors Affecting Student Attitudes Toward Flexible Online Learning in Management Education. *The Journal of Educational Research*, 2(May 2012), 37–41. <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=psyc2&AN=1970-02869-001>
- Venkatesh, V., Morris, M. G., & Ackerman, P. L. (2000). A Longitudinal Field Investigation of Gender Differences in Individual Technology Adoption Decision-Making Processes. *Organizational Behavior and Human Decision Processes*, 83(1), 33–60. <https://doi.org/10.1006/obhd.2000.2896>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information

- Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425–478.  
<https://doi.org/10.2307/30036540>
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly: Management Information Systems*, 36(1), 157–178.  
<https://doi.org/10.2307/41410412>
- Wang, W. T., & Wang, C. C. (2009). An empirical study of instructor adoption of webbased learning systems. *Computers & Education*, 53(3), 761–774.  
<https://doi.org/10.1016/j.compedu.2009.02.021>
- World Health Organisation. (2020). WHO Director-General’s opening remarks at the media briefing on COVID-19-11 March 2020. from  
<https://www.who.int/dg/speeches/detail/who-director-general-s-openingremarks-at-the-media-briefing-on-covid-19---11-march-2020>.
- Yoo, Y. (2012) “The Tables Have Turned: How Can the Information Systems Field Contribute to Technology and Innovation Management Research?,” *Journal of the Association for Information Systems*, 14(5).  
DOI: 10.17705/1jais.00334
- Zacharis, G., & Nikolopoulou, K. (2022). Factors predicting University students’ behavioral intention to use eLearning platforms in the post-pandemic normal: an UTAUT2 approach with ‘Learning Value.’ *Education and Information Technologies*, 0123456789.  
<https://doi.org/10.1007/s10639-022-11116-2>.
- Zhang, W., & Qin, S. (2018). A brief analysis of the key technologies and applications of educational data mining on the online learning platform. 2018 IEEE 3rd International Conference on Big Data Analysis, ICBDA 2018, 83–86.  
<https://doi.org/10.1109/ICBDA.2018.8367655>
- Zhao, Y., & Watterston, J. (2021). The changes we need: Education post-COVID-19. *Journal of Educational Change*, 22(1), 3–12. <https://doi.org/10.1007/s10833-021-09417-3>.
- Zhou, T. (2011). Understanding mobile internet continuance usage from the perspectives of UTAUT and flow. *Information Development*, 27(3), 207–218.  
<https://doi.org/10.1177/0266666911414596>.
- Zhou, T., Lu, Y., & Wang, B. (2010). Integrating TTF and UTAUT to explain mobile banking user adoption. *Computers in Human Behavior*, 26(4), 760–767.  
<https://doi.org/10.1016/J.CHB.2010.01.013>.