

## THE ACCEPTANCE FACTORS OF UiTM WESLLAP AS AN OPEN DISTANCE LEARNING PLATFORM BASED ON THE TECHNOLOGY ACCEPTANCE MODEL

NOOR AZLI AFFENDY LEE<sup>1\*</sup>, BOON YIH MAH<sup>1</sup>, SUZANA AB RAHIM<sup>1</sup> & MARNI JAMIL<sup>1</sup>

<sup>1</sup>Academy of Language Studies, Universiti Teknologi MARA Cawangan Pulau Pinang, Permatang Pauh Campus, 13500 Pulau Pinang, Malaysia

noor.azli@uitm.edu.my

### ABSTRACT

The crucial issues for successful technology-enhanced out-of-class language learning are the learners' attitude and the continuance intention to use technology. Hence, when designing and implementing a relevant and innovative e-learning platform, there is a salient need to identify the acceptance factors of users. The Technology Acceptance Model (TAM) has received significant recognition through various research conducted to determine users' acceptance of relevant technology innovations. This paper attempts to describe students' acceptance in using an open access e-learning website, namely UiTM WESLLAP (<https://uitmwebitors.wixsite.com/uitm-wesllap>), for their English proficiency course during the Open Distance Learning (ODL) period in April to July 2020. A set of questionnaires based on TAM was distributed to 72 semester one diploma students before the start of the ODL session. The items include the participants' perceived ease of use, perceived usefulness, attitude, and intention to use UiTM WESLLAP during ODL. The same set of questionnaires was distributed again to the same participants after ten weeks of ODL sessions using UiTM WESLLAP. The descriptive findings show increased positive perceptions of ODL by the participants after using the website. The study provides insights into the essential indicators of e-learning platform acceptance in a higher education institution, which can help in the enhancement of ODL platform for future development and implementation.

*Keywords:* acceptance; e-learning; ODL platform; TAM; UiTM WESLLAP

### 1. Introduction

Universiti Teknologi MARA (UiTM) is an emerging national model for championing Education 5.0, which advocates ubiquitous learning and learners' autonomy, pouring ways for its students towards academic success. Through innovative and high-impact educational practices, Education 5.0 at UiTM (Education 5.0@UiTM) is not about smart technology and its capability to do what humans do; instead, it is about what humans can do well rendered by these smart technology (Zu, Yu & Riezebos, 2016). Furthermore, Education 5.0@UiTM emphasises on intelligent, open, and linked webs with innovative delivery and assessment systems to transform students' learning environment into a meaningful learning experience (Gros, 2016).

Following the aims of Industrial Revolution 4.0 (IR4.0), UiTM has integrated some creative and innovative teaching and learning practices such as blended learning and Massive Open Online Courses (MOOCs) for many courses offering its students a plethora of ways to encourage learners' autonomy. The introduction of UFuture and MOOC learning platforms by UiTM have encouraged many UiTM educators to contribute towards online-based teaching and learning as well as to create their platforms to teach. However, without sufficient, culturally suitable, and authentic learning materials to be carefully selected and developed by the lecturers

that match the course outcomes and rubrics, students can get lost and confused in the vast ocean of online information (Sams, 2019). Moreover, students face several issues such as accessibility issues, usability issues, and unreadiness to do e-learning when using the proposed e-learning platforms by UiTM. Other major issues are the use of imperfect teaching platforms, insufficient or uncreative online resources that keep on demotivating the students in using the platforms, apart from the irregular internet connectivity issues.

As such, there is a need to develop an alternative e-learning platform integrated with appropriate e-learning materials that can be easily accessed and linked with, not just to provide the sufficient and necessary learning resources for students, but also to encourage autonomous learning that is free from the constraints of place and time. This can help to reduce any problems that students may face in ODL. Hence, there is a need to investigate the effectiveness of the ODL content featured in an e-learning platform or system by looking into the users' perceptions on its usefulness, ease of use, user's attitudes, behavioural intention for future use. This can provide sufficient and necessary information for educators to refine their online teaching and learning platforms. The need to consolidate the English language courses with an alternative platform led to the researchers to design a website called the UiTM Webitors' English for Second Language Learners' Autonomy Platform (UiTM WESLLAP). The study aims to identify the acceptance factors of an ODL website for English language courses, named UiTM WESLLAP, by looking into its student users' perceptions based on the Technology Acceptance Model (TAM). The four research questions in this study are:

- What are the students' perceptions of the perceived usefulness of UiTM WESLLAP?
- What are the students' perceptions of the ease of use of UiTM WESLLAP?
- What are the students' attitudes when using UiTM WESLLAP?
- What are the students' behavioural intentions to use UiTM WESLLAP in future?

## 2. Literature Review

### 2.1 Ubiquitous learning

Ubiquitous learning represents an emerging paradigm that spreads education in diverse settings, where users are situated in authentic learning contexts to face immersive experiences in order to accomplish meaningful learning (Reinders & White, 2016). Online learning theories such as learning theory, optimisation theory, and game theory (Hoi, Sahoo, Lu & Zhao, 2018) are used to build effective online learning websites for e-learning. For digital natives, meaningful learning should incorporate information and communication technology (ICT) and flexible learning hours for them to explore their learning at their own pace (Georgiadou & Siakas, 2006). With regards to ubiquitous learning, it takes advantage of digital content, physical surroundings, mobile devices, pervasive components, and wireless communication to deliver teaching-learning experiences to users at anytime, anywhere, and anyway (Cardenas-Robledo & Pena-Ayala, 2018).

There is a need to change teaching methods and strategies that lead to ubiquitous learning unhindered by the boundaries of time and space (Chang & Fang, 2020). Eachempati and Ramnarayan (2020) suggested ten maxims to outlast the academic challenges in online learning, which are:

- to be alert and aware of the needs of online instructions and its potential.
- to be selective in delivering course content using both asynchronous and synchronous online learning tools.
- to select the ideal tool to produce the maximum impact from the array of available e-learning tools.
- to do trial runs prior to the online class in order to familiarise with the online tools.

- to be empathetic to all stakeholders, for example, not all students will have optimum access to gadgets and internet data.
- to be ready with backup plans or alternative lesson materials.
- to acknowledge that online teaching is different from face-to-face sessions.
- to customise teaching to suit online needs.
- to make the online platform interactive, collaborative, dynamic and fun for everyone.
- to foster learning habits by using online formative assessment strategies.

## **2.2. Open distance learning (ODL) platform**

Educators who favour autonomy will lead to learner-centred, engaged, democratic, and meaningful education (Misir, Koban & Koc, 2018). This type of education gels well with Education 5.0@UiTM, which learning is seamless, not bound by duration and location (Wong, 2015). Although numerous studies exist on e-learning adoption, this study can add a new contribution to the existing literature on the investigation of sufficient e-learning content quality in relations to ESL learners' perceptions that can be established to advocate students' autonomy. The development of ODL platforms such as UiTM WESLLAP can encourage both educators and learners to acclimatise themselves with online and autonomous learning. Therefore, educators' role is vital during ODL for the initiation of learners' autonomy.

An effective e-learning system can bring several benefits to learners, such as increased effectiveness and efficiency of learning through better access to learning materials (Idris & Osman, 2015). Findings from Mohammad Amin Almaiah, Ahmad Al-Khasawneh and Ahmad Althunibat (2020) revealed that students preferred quality e-learning systems that are easy to use, simple, and user-friendly. Furthermore, the e-learning materials should be sufficiently accessible without any technical problem or delay. In a past study, Martin and Boliger (2018) found that working with online communication tools was among the most critical factors that helps learners to engage in online learning. Studying e-learning adoption can lead universities to understand their students' needs better and eventually lead to a successful e-learning system (Alksasbeh, Abuhelalah & Almaiah, 2019; El-Masri & Tarhini, 2017).

Though an effective ODL platform can provide several benefits to students, there are also various challenging issues that students may face during ODL. With the influx of learning materials available online, students are spoiled with choices and opportunities of autonomous learning. This poses a big challenge for students and educators to select an application or platform among the ocean of selections available on the internet. Educators need to wisely select a platform that caters to every individual need with low data consumption and better stability to facilitate their e-teaching and learning (Harsha & Bai, 2020). Additionally, several crucial factors in implementing e-learning are required to be taken into consideration, such as internet accessibility, speed, and time constraints faced by both educators and students (Bibi Noraini Mohd Yusof & Jihan Ahmad, 2020).

Besides, due to the current e-learning systems, which may experience some potential hurdles concerning accessibility, availability, and usability (Mohammad Amin Almaiah et al, 2020), alternative systems need to be developed. Based on a study conducted by Aboagye, Yawson and Appiah (2020), the most challenging issues faced by students in tertiary institutions are accessibility issues and unreadiness of students in fully online learning. In a different study, Chang and Fang (2020) list five main factors that influence the effects of online instructions including students' autonomous learning ability, teaching strategies, the suitability of online instructions, students' familiarity with online platforms or tools and evaluation methodology. Their findings indicated that a majority of their respondents agreed that the students'

autonomous learning ability is weak. Other major issues cited were the use of imperfect teaching platforms and insufficient online resources.

### **2.3. Technology Acceptance Model (TAM)**

TAM, proposed by Davis in 1989, is a theoretical framework based on the theory of reasoned action (Sivo, Ku & Acharya, 2018) that explains user acceptance of an ICT technology. The theory of reasoned action (TRA) assumes that human behaviour is the outcome led by behavioural intention (Sivo et al., 2018). The TAM model further develops this theory and suggests that user acceptance of a new ICT technology is primarily determined by perceived ease of use and perceived usefulness, which then influence the attitude and behavioural intention to use new technology by a user (Zhang, Yin, Luo & Yan, 2017).

Perceived ease of use is defined as the degree to which the user believes that using the technology will be free from effort while perceived usefulness is defined as the degree to which the user believes that using the technology will enhance his or her job performance (To, Lai & Leong, 2019). These two factors significantly influence the user's attitude towards the use of technology. Attitude towards the use of the technology is defined as the degree of favourable or unfavourable perceptions towards using the technology, and it is related to the behavioural intention to use it (To et al., 2019). More importantly, TAM is one of the most widely used technology acceptance theories due to its valid and simple model, and also the most commonly used theory for predicting the acceptance of ICTs (Zhang et al., 2017; Sivo et al., 2018).

## **3. Methodology**

Using a free-to-design and highly adaptable website called Wix.com, an online website has been designed by the researchers to provide additional learning and practice materials and activities for UiTM Diploma students throughout their English language classes. The designed website, UiTM Webitors' English for Second Language Learners' Autonomy Platform (UiTM WESLLAP), comprises various learning activities to consolidate the teaching of listening, reading and grammar via story-telling, videos, and language games. Besides, the past year papers of the English language courses taken by UiTM diploma students are also made easily accessible for the students and their lecturers to access. This website is foreseen to fill in the gap in future ODL, online, and blended learning for English language learners in UiTM. It also aims to foster learners' autonomy in their English language diploma courses at UiTM.

The researchers are interested in investigating students' perceptions of the platform used. Therefore, a quantitative design using a survey method based on TAM was conducted on 72 Diploma semester one students from the Faculty of Hotel and Tourism Management in UiTM, Cawangan Pulau Pinang (UiTM CPP), who were undergoing their first English language course (ELC121 Integrated Language Skills I) from March 2020 to July 2020. This survey is divided into several sections: respondents' demographic profile, perceived usefulness (PU), perceived ease of use (PEU), attitude (A) and behavioural intention to use (BI). There are five items each section, which the respondents have to rate each item using a 5-Likert scale (1 – Strongly Disagree; 2 – Disagree; 3 – Neutral; 4 – Agree; 5 – Strongly Agree). The survey questionnaire was given to 72 students who responded based on their perception of using the UiTM WESLLAP website during their first 3 weeks of face-to-face classes during the March-August 2020 semester. Then, the students were exposed to the use of the website for ten more weeks during the ODL sessions throughout the semester. At the end of their semester, the same respondents were given the same survey questionnaire. The findings and analysis are discussed in the next section

#### 4. Findings and Discussion

The findings and discussion are described in detail in this section.

Table 1 – Factors affecting acceptance of UiTM WESLLAP

Item	Description	Pre-test		Post-test	
		After 3 weeks of ODL		After 10 weeks of ODL	
		M	SD	M	SD
	Perceived Usefulness (PU)				
1	UiTM WESLLAP will improve my English learning performance.	3.85	0.72	4.25	0.70
2	UiTM WESLLAP will increase my academic productivity.	3.76	0.75	4.15	0.70
3	UiTM WESLLAP could make it more useful for me to study course content.	3.89	0.81	4.32	0.66
4	UiTM WESLLAP enhances effectiveness of my learning.	3.82	0.71	4.17	0.71
5	I find UiTM WESLLAP useful.	3.78	0.80	4.40	0.72
	Perceived Ease of Use (PEU)				
6	I find UiTM WESLLAP easy to use.	3.78	0.67	4.35	0.71
7	Learning how to use UiTM WESLLAP is easy for me.	3.74	0.71	4.24	0.70
8	It is easy to become skillful in using UiTM WESLLAP.	3.82	0.65	4.11	0.64
9	I understand how to use UiTM WESLLAP.	3.76	0.72	4.26	0.69
10	It will be easy for me to find information through UiTM WESLLAP.	3.68	0.78	4.17	0.76
	Attitude (A)				
11	Learning English using UiTM WESLLAP is a good idea.	3.99	0.74	4.33	0.69
12	I feel positive towards the use of UiTM WESLLAP.	3.90	0.78	4.23	0.63
13	I believe that UiTM WESLLAP helps me to be more engaging in learning.	3.85	0.72	4.23	0.63
14	I generally favour the use of UiTM WESLLAP for learning.	3.67	0.71	4.22	0.67
15	I believe that it is a good idea for me to use UiTM WESLLAP for my future English classes.	3.96	0.77	4.28	0.75

The first five constructs represent the Perceived Usefulness (PU) as shown in Table 1. The respondents record the highest mean of 4.40 (SD = 0.72) in the post-test who perceived the website to be useful. Conversely, with the lowest mean score of 4.15 (SD = 0.70), the least number of them agreed that UiTM WESLLAP would increase their academic productivity. The Perceived Ease of Use (PEU) construct of finding UiTM WESLLAP easy to use records the highest mean score as 4.35 (SD = 0.71), while another construct which states how it is easy to become skilful in using the respective website manages a score of 4.11 (SD = 0.64). The next five constructs indicate the Attitude (A) of the respondents towards the website understudy. Both pre and post-test mean scores for construct no. 14 are the lowest at 3.67 and 4.22, respectively. The respondents indicated a strong positive attitude towards the construct no. 11, whereby they perceived learning English via the website, is a good idea. As such, the highest mean scores are reflected in both pre-test and post-test as 3.99 and 4.33 for construct no. 11.

Table 2 – Factors affecting acceptance of UiTM WESLLAP (Behavioural Intention to Use)

Item	Description	Pre-test		Post-test	
		After 3 weeks of ODL		After 10 weeks of ODL	
		M	SD	M	SD
	<b>Behavioural Intention to Use (BI)</b>				
16	I intend to use UiTM WESLLAP to improve my English language skills.	3.83	0.73	4.21	0.64
17	I will always try to use UiTM WESLLAP for all my English classes.	3.71	0.68	4.10	0.67
18	I intend to use UiTM WESLLAP throughout the semester and the next.	3.82	0.73	4.24	0.63
19	I intend to use UiTM WESLLAP as often as possible.	3.67	0.69	4.04	0.68
20	I will recommend my friends to use UiTM WESLLAP for learning English courses.	3.83	0.78	4.26	0.67

The five constructs of Behavioural Intention to Use (BI) hereafter highlight the respondents' intention to opt for UiTM WESLLAP in future. The likelihood of the respondents' intention to use it scored the lowest mean score of 3.67 (SD = 0.69). Nonetheless, constructs no. 16 and 20 share the same mean score of 3.83, which happens to be the highest for BI. As for the mean scores in the post-test, construct no. 20 states that the respondents would recommend UiTM WESLLAP to their friends to learn English courses indicates the highest mean score of 4.26 (SD = 0.67). Overall, all the mean scores of PU, PEU, A, and BI constructs generally increase in the post-test as compared to the pre-test's mean scores. This indicates that UiTM WESLLAP was perceived to be useful and easy to use among the users in common after ten weeks of exposure. Furthermore, the users' PU and PEU have posed a positive effect on their attitude and behavioural intention to use UiTM WESLLAP with the increase of the respective mean scores.

## 5. Conclusion

UiTM WESLLAP can serve as a singular hub, freely accessible, and easy to navigate for students and those with the needs to improve their English language skills. The impact this website can place on the society is that it encourages the blending of classroom teaching and learning with online practices. Of significance, it can culturally prepare students for fully online learning. This website is a synonymous instance of a UiTM product that transforms the design, implementation and teaching and learning approach in line with the Education 5.0@UiTM. In summary, UiTM WESLLAP can easily exemplify how e-learning can lead to learners' autonomy, inevitably paving ways to more innovative and interactive teaching in higher education and beyond.

## Acknowledgments

The authors would like to acknowledge Universiti Teknologi MARA, Cawangan Pulau Pinang, Malaysia for giving the opportunity and support in the completion of this paper.

## References

Aboagye, E., Yawson, J.A., & Appiah, K.N. (2020). COVID-19 and e-learning: the challenges of students in tertiary institutions. *Universal Wiser Publisher*, 1 (2), 109-115. doi: 10.37256/ser.122020422

- Alksasbeh, M., Abuhelaleh, M., & Almaiah, M. (2019). Towards a model of quality features for mobile social networks apps in learning environments: An extended information system success model. *International Journal of Interactive Mobile Technology*, 13 (5), 75-93.
- Bibi Noraini Mohd Yusof, & Jihan Ahmad (2020). Are we prepared enough? A case study of challenges in online learning in a private higher learning institution during the Covid-19 outbreaks. *Advances in Social Sciences Research Journal*, 7 (5), 205-212. doi: 10.14738/assrj.75.8211
- Cardenas-Robledo, L.A., & Pena-Ayala, A. (2018). Ubiquitous learning: a systematic review. *Telematics and Informatics*, 35 (5), 1097-1132. doi: <https://doi.org/10.1016/j.tele.2018.01.009>
- Chang, C-L., & Fang, M. (2020). E-learning and online instructions of higher education during the 2019 novel Coronavirus diseases (COVID-19). *Journal of Physics: Conference Series 1574*, 1-5. doi: 10.1088/1742-6596/1574/1/012166
- El-Masri, M., & Tarhini, A. (2017). Factors affecting the adoption of e-learning systems in Qatar and USA: Extending the unified theory of acceptance and use of technology 2 (UTAUT2). *Educational Technology Research and Development*, 65 (3), 743-763. doi: 10.1007/s11423-016-9508-8
- Eachempati, P., & Ramnarayan, K. (2020). Ten maxims for out of class learning to outclass the academic challenges of COVID-19. *MedEdPublich*, 1-10. doi: 10.15694/mep.2020.000089.1
- Georgiadou, E., & Siakas, K. (2006). Distance learning: technologies; enabling learning at own place, own pace, own time. In R. Dawson, E. Georgiadou, P. Linecar, M. Ross, G. Staples (eds.), *Learning and Teaching Issues in Software Quality, Proceedings of the 11th International Conference on Software Process Improvement - Research into Education and Training* (pp. 139-150). Southampton, UK: The British Computer Society.
- Gros, B. (2016). The design of smart educational environments. *Smart Learning Environments*, 3, 1-11. doi: 10.1186/s40561-016-0039-x.
- Harsha, R., & Bai, T. (2020). Covid-19 lockdown-challenges to higher education. *Cape Comorin Journal, Special Issue*, 2 (4), 25-28.
- Hoi, S. C. H., Sahoo, D., Lu, J., & Zhao, P. (2018). Online learning: A comprehensive survey. *SMU Technical Report 1*. 1-100.
- Idris, F. A. A., & Osman, Y. B. (2015). Challenges facing the implementation of e-learning at University of Gezira according to view of staff members. *Fifth International Conference on e-Learning*, 336-348.
- Martin F., & Bolliger DU. (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. *Online Learning*, 22 (1), 205-222. doi:10.24059/olj.v22i1.1092
- Misir, H., Koban, D., & Koç, E. (2018). An analysis of learner autonomy and autonomous learning practices in massive open online language courses. *Arab World English Journal*, 4, 24-39. doi: 10.24093/awej/call4.3.
- Mohammed Amin Almaiah, Ahmad Al-Khasawneh, & Ahmad Althunibat (2020). Exploring the critical challengers and factors influencing the e-learning system usage during COVID-19 pandemic. *Education and Information Technologies*. doi: 10.1007/s10639-020-10219-y
- Reinders, H., & White, C. (2016). 20 years of autonomy and technology: How far have we come and where to next? *Language Learning & Technology*, 20 (2), 143– 154.
- Sams, A. (2019). *Flipped Classroom 101*. Retrieved from <https://www.iste.org/explore/Featured-videos/Flipped-classroom-101>
- Sivo, S. A., Ku, C. H., & Acharya, P. (2018). Extending the technology acceptance model using perceived user resources in higher education Web-based online learning courses. *Australasian Journal of Educational Technology*, 34 (4), 72-91. doi: 10.14742/ajet.2806
- To, W. M., Lai, L. S. L., & Leung, V. W. S. (2019). Technology acceptance model for the intention to use advanced business application software among Chinese business school students. *Australasian Journal of Educational Technology*, 35 (4), 160-173. doi: 10.14742/ajet.4942
- Wong, L. H. (2015). A Brief History of Mobile Seamless Learning. In Wong, L.-H., Milrad, M., & Specht, M. (Eds.). *Seamless Learning in the Age of Mobile Connectivity* (pp. 3-40). Springer. doi: 10.1007/978-981-287-113-8\_1.
- Zhang, M., Yin, S., Luo, M., & Yan, M. (2017). Learner control, user characteristics, platform differences, and their role in adoption intention for MOOC learning in China. *Australasian Journal of Educational Technology*, 33 (1), 114-133. doi: 10.14742/ajet.2722
- Zhu, Z., & Yu, M-H. & Riezebos, P. (2016). A research framework of smart education. *Smart Learning Environments*, 3. doi: 10.1186/s40561-016-0026-2