

## I-ROLE 2023

## International Conference of Research on Language Education

**ESL UNDERGRADUATES' ENGAGEMENT WITH WEB-BASED  
TOOLS AT A MALAYSIAN PUBLIC UNIVERSITY**

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**Abstract**

The educational sector has been hugely affected by the Covid-19 pandemic globally. In Malaysia, the Ministry of Education (MOE) ordered educational institutions to conduct teaching and learning activities via Web-based technologies to ensure the continuity of educational practices. However, local studies raised increasing concerns over the applicability of Web-based tools in learning English as a Second Language (ESL). A critical question that requires a specific contextual response concerns the students' attitudes toward Web-based learning. Therefore, using the Technology Acceptance Model (TAM), this study sought to examine ESL undergraduate students' engagement with Web-based tools and their perceived benefits at a public university in Malaysia. A cross-sectional survey was conducted using structured questionnaires to collect data from a random sample of 100 ESL undergraduates. The survey data were analyzed using descriptive statistics via SPSS Version 26.0. The findings revealed that ESL undergraduate students at the selected institution have a high level of engagement with Web-based tools in learning the English language. Additionally, the students believe that Web-based tools' flexibility helps them perform their learning tasks easily and develop English proficiency. However, the students demonstrated a moderate level of perceived benefits of using Web-based learning tools. This study could offer insights and valuable pedagogical suggestions on the use of Web-based communication tools in Second Language Education (SLE), particularly in the Malaysian context.

2672-815X © 2023 Published by European Publisher.

*Keywords:* ESL learners, second language education, web-based learning, web-based tools

## 1. Introduction

Education is one of the most critical sectors necessary for human development toward morals, values, beliefs, creativity, innovation, and talent as well as sustainable development (Nasri et al., 2020). However, there has been serious concern over the impact of Covid-19 on educational practices at all levels. One of the most vital questions, which needs specific contextual answers, concerns how the Covid-19 pandemic influences teaching and learning practices (Onojah & Onojah, 2020; Wen & Kim Hua, 2020). This question reaffirms the necessity for continuous research toward solutions and prevention of pedagogical problems caused by the Covid-19 pandemic. Hence, this area grows into a prospect for pedagogical research and explicit attention to second language teaching and learning. Connected with this new emphasis is a strong curiosity about the situations and ways in which the Covid-19 pandemic impacts how educational activities are conducted as well as students' academic successes.

### 1.1. Use of Web-based Tools in ESL Education

One of the most contentious areas of increasing interest is the domain of e-learning and its challenges (Baber, 2020; Du et al., 2022; Krishnan et al., 2020). Just recently, studies focused on the use of online technologies in ESL teaching and learning during the Covid-19 pandemic using different approaches (e.g. Clement & Yunus, 2021; Karuppanan & Mohammed, 2020; Wen & Kim Hua, 2020). These studies demonstrated how ESL instructors and students perceive, adopt, and use web technologies. For instance, Onojah and Onojah (2020) investigated the influence of online technologies in combating the learning gaps established by Covid-19 as well as students' willingness to use these technologies. The study concluded that google classroom, webinar Zoom applications, and mobile learning among others can improve students' academic achievements and teachers' job performance.

Another study employed quantitative and qualitative approaches to explore the perceived usefulness of online resources among pre-elementary intensive English students (Krishnan et al., 2020). According to the findings, online resources are perceived to be valuable tools for learning English, especially reading, conversation, and vocabulary development. As a result of the shift toward online education during the Covid-19 pandemic, some studies focus on the perceived quality of teaching as well as learning outcomes. For example, Baber (2020) examined the determinants of perceived learning benefits and their impact on learners' satisfaction among undergraduates in India and South Korea. The study found that interaction, course structure, teachers' knowledge, resources, and motivation have a positive influence on students' perceived learning outcomes and satisfaction. Similarly, a study established that learners' attitudes and experiences are likely to have contributed relatively to the success of the "transition from face-to-face to online learning" (Johnson et al., 2021, p. 1).

In Malaysia, specifically, local studies explored the factors and perceived usefulness of web technologies among ESL learners. In this context, for instance, Karuppanan and Mohammed (2020) investigated the factors affecting e-learning among English language learners in Malaysia. According to the study, there is increasing concern over ESL learning, particularly language proficiency, during the Covid-19 pandemic in Malaysia. In sum, previous studies identified various factors that affect the implementation of web-based tools in ESL education during the Covid-19 pandemic, including the

suitability of the work environment, access to resources and infrastructure, as well as technological competence. The learning process has always been a major priority (Baber, 2020), and thus, researchers keenly explored how educational activities are conducted during the Covid-19 pandemic (Baber, 2020; Krishnan et al., 2020; Wen & Kim Hua, 2020). However, previous local studies on web-based ESL learning mostly focused on secondary school education. Therefore, this research focuses on web-based tools for the teaching and learning of English at the university level.

## 1.2. Theoretical Approach

This research will be guided by Davis' (1989) Technology Acceptance Model (TAM) to explain ESL undergraduate students' engagement with web technologies and their perceived benefits. The model was developed in a study involving 152 users of technology. According to Davis (1989), the perceived usefulness of using technology and its perceived ease of use significantly determine the acceptance of technology among users. Additionally, both perceived usefulness and perceived ease of use were reported to correlate significantly with "self-reported current usage and self-predicted future usage" (p. 319). However, usefulness had a considerably greater association with usage behavior compared with ease of use. TAM has been widely used in previous studies to determine user acceptance of technology in various fields (Hsu & Lin, 2022; Porter & Donthu, 2006; Scherer et al., 2019). For instance, Porter and Donthu (2006) established that "users tend to overcome difficulties in using new technology if the benefits of usage are substantive" (p. 1001). Based on this assumption, the current study sought to examine engagement with web-based learning tools and their benefits among ESL undergraduate students at a Malaysian university. Determining the usage of web-based tools among ESL learners is paramount as the success of e-learning depends on users' attitudes toward how technology is integrated (Kundi et al., 2010; Osei et al., 2022).

## 2. Problem Statement

In Malaysia, the first Movement Control Order (MCO) issued by the Malaysian government was on March 18, 2020. The MCO was "imposed nationwide by the government, resulting in the immediate closure of schools and universities. Consequently, teaching and learning were instantaneously transformed into distant and remote formats" (Nasri et al., 2020, p. 546). This order serves as a measure to contain the spread of Covid-19 across the country (Bunyan, 2020). Afterward, instructors were provided with guidelines for teaching and learning (Wen & Kim Hua, 2020). These guidelines are an initiative to ensure that teaching and learning activities progress. The Ministry of Education (MOE) required educators to utilize online pedagogical tools, such as Google Classroom, in executing teaching and learning activities during the pandemic (Kenyataan Media, 2020).

As Web-based learning becomes necessary, local studies raised increasing concerns over the use of web-based tools for English learning practices in the Malaysian context (Clement & Yunus, 2021; Karuppanan & Mohammed, 2020). Despite the significance of English as a second language in Malaysia (Thirusanku & Yunus, 2014), very few studies looked at how the Covid-19 pandemic influences ESL teaching and learning in the Malaysian context (Clement & Yunus, 2021; Wen & Kim Hua, 2020). It is,

therefore, necessary to investigate students' experiences in using web-based tools during the Covid-19 pandemic.

### **3. Research Questions**

This study questions the use of web-based learning tools among ESL students of a Malaysian public university to examine the level of their engagement and perceived benefits of the tools.

### **4. Purpose of the Study**

Specifically, this study aims to determine the level of EFL undergraduates' engagement with web-based tools in learning the English language and examine their perceived benefits of using web-based tools at the selected public university.

### **5. Research Methods**

This research adopted a cross-sectional survey method to describe ESL undergraduate students' experience of using Web-based tools. As mentioned by Creswell (2012), cross-sectional investigation represents one of the most widely-applied forms of survey. In cross-sectional surveys, researchers collect data one time. This design offers the benefit of evaluating the current opinions, attitudes, characteristics, behaviors, or practices of a group of individuals. The design also helps to gather data within a short expanse of time (Creswell, 2012; Konting, 2000).

#### **5.1. Data Collection**

The data were collected from a sample of 100 students drawn from a total population of 300 ESL undergraduates at a Malaysian public university. The questionnaire was constructed based on a five-point Likert scale designed to take about 15-20 minutes to be completed, including time for instructions about the survey. This process encourages the participants to respond to the questions as accurately as possible. A simple random sampling technique was used to draw the sample for this study. Random sampling is most commonly used in survey research for its advantage of collecting data within a short period (Allen et al., 2008). Whereas, the sample size was determined using Krejcie and Morgan's (1970) formula for sample-size calculation.

#### **5.2. Reliability and Data Analysis**

The research instrument was evaluated to ensure reliability and validity. The reliability of the questionnaire was ascertained using the Cronbach Alpha method (Cronbach, 1951). Cronbach Alpha is computed in terms of the average inter-correlation among items. The results indicated reliability levels of .719 and .922 for engagement and benefits respectively. For validity, the questionnaire was evaluated by experts using the face validity technique to ascertain their applicability and significance, and afterward, the questions were polished based on the experts' recommendations. The data were processed using

descriptive analysis, ie. mean, standard deviation, and frequency. All interpretations were made at  $\leq 0.05$  alpha ( $\alpha$ ) level through the SPSS software Version 26.0).

## 6. Findings

All the survey questionnaires were returned and confirmed valid for analysis, signifying a 100% response rate. The demographic data indicated that the participants' ages ranged between 24 and 29. Also, the participants consist of 41 (41.0%) males and 59 (59.0%) females. In terms of ethnic origin, the participants consist of 92 (92.0%) Malays and eight Chinese. Also, 62 (62.0%) of the participants use WiFi hotspots while 38 (38.0%) of them use the mobile network to perform their web-based learning tasks. Regarding English proficiency, 89 (89.0%) of the participants self-reported an "intermediate" level, while only 11 (11.0%) of them self-reported a high level of proficiency. None of the participants indicated a low level of English proficiency. For this study, the first objective sought to determine the level of ESL learners' engagement with web-based tools in learning the English language at the selected university. Table 1 reveals a high level (Mean=4.12; SD=0.882) of undergraduate students' engagement with web-based communication tools in learning English during the Covid-19 pandemic.

**Table 1.** ESL undergraduates' engagement with web-based tools

SN	Items	Total (F/%)				
		Mean	SD	A+SA	D+SD	N
1	I attend my English classes regularly using web-based learning tools	4.75	0.434	96.00	1.00	3.00
2	I feel comfortable with the use of web-based tools during the English classes	4.30	0.936	78.00	8.00	14.00
3	I feel highly motivated to perform my learning tasks using web-based tools	4.55	0.476	90.00	6.00	4.00
4	I enjoy learning the English language using Web-based tools	4.40	0.632	79.00	8.00	13.00
5	If possible, I will continue to learn English using Web-based tools as frequently as possible	4.20	0.752	71.00	7.00	22.00
6	I have a strong interest in Web-based learning of the English language	4.00	0.828	67.00	11.00	22.00
7	I am highly satisfied with learning English using Web-based tools	4.65	0.632	91.00	3.00	6.00
8	I manage my time effectively when learning the English language using Web-based tools	4.00	1.271	67.00	18.00	15.00
9	I feel that Web-based learning of English requires advanced technical knowledge	4.00	1.094	67.00	16.00	17.00
10	I do not think Web-based learning of English is a rational idea	2.35	1.768	18.00	74.00	8.00
	<b>Total</b>	<b>4.12</b>	<b>0.882</b>	<b>72.40</b>	<b>15.20</b>	<b>12.4</b>

Note: Level indicator: high=3.5-5, moderate=3.0-3.49, low=0.1-2.99

It can be further observed from Table 1 that most of the students attend online classes regularly (96.0%). Also, most of the students (90.0%) feel highly motivated to perform their learning tasks using web-based tools. They also enjoy (79.0%) and have a strong interest (67%) in learning English using web-based tools. Additionally, most of the students (71%) opine that, if possible, they will continue to

learn English using web-based tools as frequently as possible. This is because, perhaps, the students are highly motivated (Mean=4.55) and satisfied with learning English using Web-based tools (Mean=4.65). Also, very few (18.0%) of the students think that web-based learning is an irrational idea, with a low mean value of 2.35. However, the students feel that web-based learning requires advanced technical skills (Mean=4.00). The second objective of this study sought to examine the perceived benefits of using web-based tools among students in learning the English language. This outcome is depicted in Table 2 as follows.

**Table 2.** ESL undergraduates' perceived benefits of web-based tools

SN	Items	Total (F/%)				
		Mean	SD	A+SA	D+SD	N
1	Web-based learning helps me to develop English proficiency	3.70	0.617	60.00	0.00	40.00
2	Web-based technology makes my learning of English more efficient than ever before	3.45	0.712	32.00	4.00	64.00
3	I think the use of web-based tools to fulfill my assignment tasks is time-saving	3.35	1.013	37.00	25.00	38.00
4	I find it easier to process information using Web-based platforms compared with the face-to-face approach	3.40	1.018	45.00	34.00	21.00
5	I think the use of web-based speeds up my learning of the English language	3.35	0.822	37.00	33.00	30.00
6	My comprehension of English lessons has improved after the implementation of Web-based learning	3.40	0.677	45.00	8.00	47.00
7	Web-based learning helps me to increase my grades in English courses	3.50	0.792	48.00	17.00	35.00
8	Web-based learning tools enable me to communicate effectively	3.20	1.082	36.00	30.00	34.00
9	I perform my learning tasks easily using Web-based tools due to their flexibility	3.70	1.096	58.00	15.00	27.00
10	I believe that Web-based learning provides me with opportunities for autonomous learning	3.30	1.054	36.00	22.00	42.00
<b>Total</b>		<b>3.46</b>	<b>0.888</b>	<b>43.40</b>	<b>18.80</b>	<b>37.80</b>

Note: Level indicator: high=3.5-5, moderate=3.0-3.49, low=0.1-2.99

Table 2 depicts the perceived benefits of using web-based tools among ESL undergraduate students. To a high extent (Mean=3.70), the flexibility of web-based tools helps students to perform their learning tasks easily and develop English proficiency. Almost half (48.0%) of the students agreed that Web-based learning helps them to increase their grades. Also, more than one-third (37.0%) of the students believe that web-based learning saves time and speeds up their learning of English. Similarly, more than one-third (36.0%) of the students believe that the use of web-based tools provides them with opportunities for autonomous learning and enables them to communicate effectively (36.0%). Whereas, almost one-third (32.0%) of the students opine that web-based technology makes their learning of English more efficient than ever before. Additionally, almost half (45.0%) of the students agreed that web-based learning enables them to comprehend lessons and process information easily. Overall, the findings revealed a moderate level (Mean=3.46; SD=0.888) of perceived benefits of using web-based learning tools among ESL undergraduate students at the selected university.

## 6.1. Discussion

This study revealed a number of significant outcomes. First, undergraduate students have a high level of engagement with web-based communication tools in learning English during the Covid-19 pandemic. This outcome indicates the students' interest and passion for the web-based learning of English. However, they have a moderate level of perceived benefits of using web-based tools in learning the English language. Perhaps, the students were motivated to engage in web-based learning by factors other than its perceived benefits. This is because, as postulated by TAM, self-reported usage of technology is largely determined by its perceived benefits among users (Davis, 1989). Also, users tend to be more motivated by the perceived benefits of technology compared with its ease of use. This assumption concurs with the findings of Porter and Donthu (2006) that users of technology tend to overcome technical problems if perceived benefits are essential.

Additionally, factors such as inadequate preparatory training, age, experience, and social status, might influence the students' perceived benefits of using web-based learning tools. In essence, the findings suggest that students require more awareness of the benefits of using web-based tools in learning the English language. This awareness is paramount as learners tend to succeed in web-based learning based on their attitudes and experience (Johnson et al., 2021), which can help them to negotiate a common understanding of their learning purpose and keep the use of web-based tools at the center of the learning process. This is because, as pointed out by previous research (Kundi et al., 2010; Osei et al., 2022), learners' attitudes are critical in determining the success of web-based learning systems. According to Kundi et al. (2010), successful web-based learning depends on the ability to connect user perceptions, learning styles, and learning tools. Thus, learners with a high level of perceived benefits of web-based tools are more likely to have a high level of motivation toward web-based learning, which eventually leads to a high level of engagement.

Moreover, the students reported that the flexibility of web-based tools helps the students to perform their learning tasks easily and develop English proficiency. This is, possibly, because the flexibility of web-based systems enables learners to perform learning tasks at their convenient location and time. This flexibility, as mentioned by Du et al. (2022), has been described "as one of the most attractive features of online learning" (p. 286). For this reason, perhaps, many of the students believe that web-based learning helps them to increase their grades. This outcome concurs with the findings reported by (Krishnan et al., 2020) that online tools are perceived to be a valuable means of learning English, particularly reading, conversation, and vocabulary development. Besides, according to the current study, a sizable number of ESL undergraduates specified that web-based learning empowers them to process information easily, comprehend lessons, and speed up their learning of English. This outcome also concurs with previous research on technology and education (Onojah & Onojah, 2020).

## 7. Conclusion

Using TAM, this study offers insights into ESL undergraduate students' engagement with web-based tools and their perceived benefits at a public university in Malaysia. The findings indicated that while the students reported a high level of engagement with web-based tools, they have a moderate level

of perceived benefits of using web-based learning tools. It was also found that the flexibility of web-based tools helps the students to perform their learning tasks easily and develop English proficiency. According to the findings, the students require more awareness of the benefits of web-based tools in learning the English language. This study is expected to influence the decision of the government, policymakers, instructors, and relevant authorities in designing a web-based learning curriculum, especially in the ESL context. Additionally, the current study could advance our understanding of students' engagement in web-based learning and their perception of the benefits of web-based tools. This is because research into web-based learning tends to focus on factors affecting the implementation of web-based learning with limited attention to students' engagement with web-based tools and their perceived benefits. However, the current investigation focused on a cross-sectional case study of a few participants. Thus, further research may employ a longitudinal analysis with larger participants to yield generalizable outcomes and determine whether students' engagement with web-based learning tools changes over time.

## Acknowledgment

The authors of this paper would like to thank the Center for Research Excellence and Incubation Management (CREIM), Universiti Sultan Zainal Abidin (UniSZA), for funding this research with project number R0328 and reference code UniSZA/2021/DPU2.0/01”

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