

April 2024 • Vol.9, No.1 www.e-aje.net pp. 57-68

# **Exploring Vietnamese EFL Learners' Perceptions towards Online Learning at University Education**

#### Ngoc Tai Huynh

Corresponding author, Tra Vinh University, Vietnam, hntai@tvu.edu.vn

#### Tuyet-Nhung Thi Nguyen

Tra Vinh University, Vietnam, nttuyetnhung@tvu.edu.vn

This study investigates the perceptions of Vietnamese English-majored students towards online learning courses during the Covid-19 pandemic. While online learning has been shown to have numerous benefits, few studies have focused on exploring perceptions of Vietnamese learners of English (EFL) towards online learning course at university level in the Vietnamese context. To address this gap, the present study surveyed 60 Vietnamese EFL learners who have experience with online courses offered by a university in southern Vietnam, using the Technology Acceptance Model (TAM) developed (Davis, Bagozzi, & Warshaw, 1989). The findings reveal various challenges and benefits of the online learning mode, which are reported by learners through their perceived usefulness and perceived ease of use when taking online courses. The learners' own experiences during online courses were also revealed. The outcomes of this study provide insights into the unique experiences of Vietnamese EFL learners with e-learning and offer suggestions for optimizing online education for this population in university settings.

Keywords: E-learning, English as a foreign language (EFL), Vietnamese EFL learners, technology acceptance model (TAM), online education

## INTRODUCTION

The covid-19 pandemic, which began in late December 2019, has had a devastating impact on all aspects of life, causing radical changes worldwide. Not only has the economic sector been affected, but the educational sector as well (Le et al., 2021). According to Le et al. (2021), this epidemic has significantly impacted students worldwide, with schools, colleges, and universities being forced to close due to the widespread distribution of the coronavirus.

Njeguš (2022) demonstrated that covid-19 has affected the education of over 220 million university students globally, resulting in a decline in the quality of education and making it challenging for teachers to teach specific subjects. Consequently, colleges have had to adapt to new teaching methods and trends to assist their students and maintain the quality of their education. With easier access to information sources on the internet from all over the world, online learning has become more prevalent and stronger. As a result, it is expected that online learning will surpass traditional learning in popularity (Valentine, 2002). Furthermore, the global expansion of the covid-19 pandemic and class suspensions have made online learning necessary to help students keep up with their studies, as demonstrated by Moorhouse (2020). There are two types of online learning: synchronous and asynchronous online learning. This study will focus on exploring synchronous online studying.

When researching the possibility of e-learning, it is crucial to gain insight into students' perceptions of online or distance learning (Yilmaz, 2019). Due to covid-19, the traditional education system has globally shifted to online learning, requiring both students and teachers to adapt to this new style of studying (Yousaf et al., 2021). This presents numerous challenges, including accessibility and

Citation: Huynh, N. T., & Nguyen, T.N.T. (2024). Exploring Vietnamese EFL learners' perceptions towards online learning at university education. *Anatolian Journal of Education*, 9(1), 57-68. https://doi.org/10.29333/aje.2024.914a

knowledge (Ferri et al., 2020). Although covid-19 is not as severe as before, and many students have returned to colleges, institutions, colleges, and universities should be prepared for any negative events that may arise in the future. Therefore, Park (2009), in line with Bell and Federman's (2013) ideas, suggests that learners' attitudes towards e-learning should be considered to better prepare for alternative means of education.

The research conducted by Khorsheed et al. (2021) presents several findings, including the advantages of online learning outside of traditional classrooms. However, the study did not differentiate between two common modes of learning (i.e., online learning and traditional learning). Additionally, while Rakhmanina et al. (2021) has discussed the pros and cons of online learning, the article did not focus on its promotion.

It seems that various studies have been conducted to explore different aspects of online learning, especially in the covid-19 pandemic in a diversity of contexts. To date, however, little research has reported perceptions of Vietnamese EFL students towards online learning whereas this mode of learning has been a common option for Vietnamese education providers to deliver courses in the time of pandemic. The current article aims to bridge such a gap to contribute to the literature in the field of English education in the Vietnamese context.

## **Research Objectives**

This research paper aims to investigate the perceptions of students majoring in English towards online learning in the Vietnamese context.

## **Research Question**

The research question that this paper seeks to answer is: "What are the perceptions of Vietnamese EFL learners towards online learning in university education?"

#### **Literature Review**

In the context of the covid-19 pandemic, online education has become a common and dynamic approach to content delivery. This provides students with exciting opportunities to interact and share learning experiences, as supported by Khorsheed et al. (2021). Access to technology can also enhance the quality of education, but not all educators possess the necessary skills for online teaching. The development of online learning has progressed through three stages: the pioneer phase, the communities in the practice phase, and the standardization phase, as recognized by university managers who invite their academic staff to adopt best practices (Khorsheed et al., 2021).

Numerous studies have investigated students' perceptions of using information technology in their learning, and in general, students respond positively to the implementation of e-learning (Vitoria et al., 2018). The first form of e-education, Computer-Based Training (CBT), was launched in the late 1980s and 1990s. This is considered the foundation of e-learning today (Eger, 2005, as cited in Hubackova, 2015).

## **Online Learning**

Online education is a form of distance learning that utilizes computers and the internet as the primary delivery method, with at least 80% of the course material being provided online. This method of learning is referred to as PJJ (Distance Education) in schools, while universities refer to it as elearning or online learning (Tedja, 2020). Online learning is an alternative for learners who want to use technology and/or the internet to learn in their own environment. It takes place across a computer network, including the Internet, the World Wide Web, a local area network (LAN), or an intranet 4.0, as mentioned by Rahman (2009). This type of education is designed to provide instruction to nonresident students, typically adults, who receive lessons and exercises by mail or other technology and then return them after completion for review, criticism, and grading (Khorsheed et al., 2021). The

primary goal of online education is to provide educational opportunities to under-represented groups and people without access to regular educational institutions (Allen & Seaman, 2008; Gousiou & Grammenos, 2023; Jónasson, 2001; Shelton & Saltsman, 2005; Staddon, 2023). There are two types of e-learning, including synchronous and asynchronous online learning.

Synchronous online learning has become increasingly popular in various fields, including education, due to its proven benefits. This type of e-learning involves structured and time-bound activities that are delivered through chat and webinar options. According to Amiti (2020), a synchronous learning environment is one where teachers and students meet online on a specific platform to exchange lessons. Skylar (2009) also noted that the advantages of using a synchronous learning environment include real-time learning, knowledge sharing, and immediate access to instructors for questions and answers.

On the other hand, asynchronous online learning allows individuals to learn at their own pace and within a set period of time. Loomis (2019) found that this type of learning provides access to completed lectures, readings, assignments, and other learning materials. Additionally, Picault's (2021) study revealed that asynchronous online courses may include brief videos covering important concepts that can be viewed repeatedly. In some classes, students can receive feedback on their homework immediately, rather than waiting for the teacher to grade it. Nandi et al. (2012) also emphasized that asynchronous online programs do not require students to be online at the same time as their lecturer or classmates.

## The advantages and disadvantages of online learning

There are several advantages to adopting e-learning in education. Yuhanna (2020) supports the idea that online learning can offer learners numerous benefits throughout their academic and professional careers. Findings from Rafiq et al. (2020) suggest that many students have positive opinions about online learning. Rashid and Yadav (2020) note that online lecture platforms have replaced traditional face-to-face classes in universities, which is also a solution to prevent the spread of the COVID-19 virus, as agreed by Malki et al. (2021).

Online learning is more effective than classroom learning for discussions with classmates and other students. This creates opportunities for relationships among learners through the use of discussion forums. Additionally, e-learning encourages students to interact with others, exchange ideas, and respect different points of view. Pupils are also satisfied with the online instructional services provided by their lecturers. According to Barker (1994), as cited in Song and McNary (2011), interaction in the learning environment is a fundamental and essential process for knowledge and cognitive development. Furthermore, e-learning enhances the effectiveness of knowledge and qualifications through easy access to vast amounts of information.

Debourgh (2003) believes that teacher-student interaction is a significant element that influences how well students learn in online courses. Wagner et al. (2008) note that e-learning creates additional opportunities for student-teacher interaction during content delivery. The article also shows that e-learning is cost-effective since students do not need to travel from home to school or from dormitory to school. Moreover, Yousaf et al. (2021) agree that distance learning offers flexible study time and place. The article from Khalil et al. (2020) also reveals that due to the flexibility of time in online studying, students can spend more time on their personal pursuits. Distance learning is also an ideal option for scholars or working students who wish to study remotely (Dhawan, 2020) since studying at home is more convenient for them (Arkorful & Abaidoo, 2015).

Although various studies have reported the benefits of online learning, there are several reports on the challenges of online learning. Ansar et al. (2020), for instance, concluded that many learners still hold pessimistic views towards online learning due to its negative effects. Additionally, the research conducted by Rakhmanina et al. (2021) indicates that while online learning is considered

advantageous, it is not entirely so. The study's data shows that the majority of students actively participated in online learning, but it did not necessarily mean they were enthusiastic.

Furthermore, many students expressed their burden with the assignments, as all instructors assigned them work, leading to an excess of pressure (Khusniyah & Hakim, 2019). Participants in Adnan and Anwar's study (2020) also found mastering the listening component of an online English class to be challenging. Additionally, some learners mentioned that it was difficult to focus on the listening activity in a noisy environment and needed a quiet spot to concentrate on their lessons (Ha & Ngo, 2021). Furthermore, while the delivery of online learning materials was largely satisfactory, some students claimed that downloading audio material took a long time due to poor internet quality (Narang et al., 2022). Additionally, technology devices are believed to mediate interactions between students and teachers, and the lack of a computer or smartphone significantly affects learning results (Bower, 2019; Gonzales et al., 2020; Wang et al., 2013).

#### The Theoretical Framework

In this study, the researchers utilized the Technology Acceptance Model (TAM), an information system theory developed by three influential researchers, Fred Davis, Richard Bagozzi, and Paul Warshaw (1989), as a general theoretical framework to understand how participants come to accept technology in learning. TAM is one of the most popular theories in the Information System discipline and has been studied and verified by various researchers to explore technology acceptance behavior in different research contexts. TAM aims to investigate whether information systems are accepted after only a brief period of engagement (Pilli et al., 2014). TAM has emerged as the most widely used model for evaluating the adoption, value, and use of technology (Al-Adwan et al., 2013). Pilli et al. (2014) used TAM (Figure 1) to investigate the effects of outside influences on perceptions about using an e-learning system. They demonstrated the relationship between each independent factor's traits and attitude toward using the e-learning system. Pilli et al. (2014) classified the independent components into two primary groups, including technology factors and student factors. However, our research focuses on exploring students' perceived usefulness, perceived ease of use, and attitude towards online learning mode.

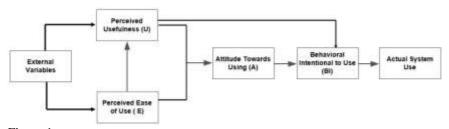


Figure 1 Technology acceptance model (Davis et al., 1989)

As shown in Figure 1, the use of Information Technology (IT) systems is determined by behavioral intention (BI), while the attitude towards using the system (A) influences the behavioral intention. Theorists suggest that the attitude towards using the system is based on its potential impact on users' performance. This means that even if users are hesitant to use a new system, they are more likely to use it if they perceive that it will improve their work performance. Additionally, theorists propose that a user's belief in the usefulness of the system is affected by its ease of use.

Online learning has become a crucial aspect of students' education, particularly during the covid-19 pandemic (Hermanto & Srimulyani, 2021; Radha et al., 2020). According to Saikat et al. (2021), distance learning has been adopted as a replacement method to help students keep up with their coursework during the crisis. Although the situation with covid-19 has improved, online education is

still being used as a backup method in case of any future unfavorable events. Despite its advantages, online learning also presents challenges for both students and teachers. Therefore, understanding remote studying is essential to finding solutions for these drawbacks (Almaiah et al., 2020; Mahyoob, 2020; Suharno et al., 2023). In the following section, this paper will explore the effects of technology on online learning, as well as the advantages and disadvantages of this mode of learning.

#### **METHOD**

## The Participants

This study aims to investigate how English majors at a university in southern Vietnam perceive the use of online education in their studies. The target population was selected undergraduate students of English Studies program at one university in southern Vietnam. The participants were selected based on the following criteria:

- Academic level: Participants should be enrolled in the undergraduate program in English Studies at the university.
- Online learning experiences: The participants have experiences with online learning modes at the university during the covid-19 pandemic.
- Gender: The group of participants should consist of both male and female students to ensure a balanced representation of perspectives.
- Diversity: The selection process aimed to include participants with diverse backgrounds and experiences. Moreover, the participants were chosen using purposive sampling to capture a range of perspectives.
- Sample size: the target sample size was 60 to 100 participants. This number was determined to be sufficient to gather meaningful insights and analyze the data effectively.
- Confidentiality: Participants were assured that their responses would be kept confidential. This commitment to privacy helped to encourage open and honest answers, allowing for accurate data collection.

As a result, a group of 60 respondents, consisting of 20 males and 40 females ranging from freshmen to seniors, completed the online form questionnaire.

## The Research Instrument

The research instrument used in this study is a set of questionnaires which includes 23 questions related to online learning. These items are divided into three clusters, which investigate perceived usefulness, perceived ease of use, and attitude toward use, as outlined in the framework by Davis et al. (1989) (as cited in Pilli et al., 2014). The questionnaire was adapted from Adams et al. (2019) because the researchers realized that many items of the questionnaire developed by Adams et al. (2019) suit the primary objective of the present article. However, since the target participants in the current study were Vietnamese students of English-majored program, six additional items (four items focus on participants' perceptions towards the use of L1-Vietnamese and L2- English, and two items focusing on the applications used for online learning courses, i.e., Google Meet and Microsoft Teams) were added in the questionnaire used in the current article. To test the reliability of the three clusters in the questionnaire was 0.77 (13 items related to learners' perceived usefulness and perceived easy of use), and 0.71 (ten items related to learners' attitude towards online studying). These suggest the reliability of the questionnaire is acceptable.

## **Data Processing**

This study applied quantitative descriptive approach through based surveys to provide a valuable analytical study of the topic. An online survey was used to collect data for the current study. Research

data is collected by a questionnaire through Google Forms. After investigating the participants' respondents to understand their views on using e-learning, the data was analysed and modelled to get answers to the questions. After collecting the data, it was imported into Excel to expedite the analysis process using IBM SPSS Statistics. To assess reliability, Cronbach's alpha was utilized to measure internal consistency, which helped determine if the items were strongly related. The software was then used to run Descriptive Statistics, examining the mean scores of the items to report the findings on participants' opinions towards online learning modes.

## **FINDINGS**

## Learners' perceived usefulness and perceived ease of use towards online learning

To determine the average scores, a descriptive statistical test was conducted on 13 items related to perceived usefulness and perceived ease of use. The results are presented in Table 1.

Mean scores of perceived usefulness and perceived ease of use

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std.
					Deviation
More interaction with classmates	60	1	5	3.13	1.308
Easier teamworking	60	1	5	2.88	1.263
Better learning	60	1	5	2.78	1.236
Well time-management	60	1	5	3.43	1.212
Time planning	60	1	5	3.38	1.195
Keep up with schedule	60	1	5	3.43	1.095
Important to interact	60	1	5	3.85	1.022
Difficult to manage	60	1	5	3.28	1.195
Difficult to interact	60	1	5	3.55	1.294
Important to interact with instructors	60	2	5	4.08	.889
Seeking helps from instructors	60	2	5	4.00	.883
Informing instructors	60	1	5	4.03	.956
Asking instructors to clarify	60	2	5	3.93	.954
information					
Valid N (listwise)	60				

Overall, most of the items had a moderate mean score, and there was no data indicating a low level. The item with the highest score of 4.08 was "important to interact with instructors," followed by "Informing instructor" (M= 4.03) and "Seeking help from instructors" (M= 4.00). These findings suggest that the instruction of students' instructors is crucial. Learners still need their instructors to assist them with many issues that arise in an online class. Also, in terms of interaction, the statistics showed that the item "Important to interact" had a pretty high mean score (M= 3.85) which suggests that the majority of students consider interacting with others in an online classroom to be extremely important. Some students agreed that they are able to effectively manage their time and keep up with the online course schedule. Specifically, the items "Well time-management" and "Keeping up with schedule" had the same mean score of 3.43. Additionally, although the item "Better learning" had the lowest scale of agreement (with a mean score of 2.78), its range was still within the moderate mean score level. This may suggest that the participants may believe that studying online is better than face-to-face learning.

## Learners' attitude towards online learning

To determine how learners' personal online learning experiences impacted the mean scores, descriptive data were analysed for ten items. These results are clearly depicted in Table 2.

Table 2 Learners' Attitude towards online learning

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
L1-L2 different in time	60	1	5	3.83	.997
L1-L2 different in place	60	1	5	4.15	.936
Freedom	60	2	5	4.10	.951
More courses	60	1	5	3.77	1.155
Enough equipment	60	1	5	3.73	1.056
Prefer L1 to L2	60	1	5	3.13	1.282
No L1-L2 difference	60	1	5	2.28	1.223
Using Microsoft Teams	60	1	5	3.58	.979
Using Google Meet	60	2	5	3.93	.756
No enjoyment	60	1	5	2.72	1.195
Valid N (listwise)	60		•		•

In general, the mean scores released were mostly high, although there were also instances of medium and low levels. The item "L1-L2 different in place" had the highest statistics (M= 4.15), which accounted for a high level of mean score. The same level also appeared on the item "Freedom" with a slightly lower mean score of 4.10, followed by the item "Using Google Meet" (M= 3.93), which was the software that learners mostly used during their online courses. It can be concluded that most English majors agreed that learning online offered them flexibility in terms of where they could study, and they were satisfied with the method as it gave them more freedom while studying from home. Moreover, the three items "Using Microsoft Teams", "Prefer L1 to L2", and "No enjoyment", which showed the medium range, had mean scores of 3.58, 3.13, and 2.72, respectively. This indicates that the participants in this study had relatively positive experiences during their online classes, and Microsoft Teams was the second most commonly used application. However, a significant number of students still did not find any interest in distance education. In addition, the item "No L1-L2 difference" (M= 2.28), with the lowest mean score, presented the only low level of mean score in this cluster. The finding demonstrated that almost all students believed there was a significant difference between e-learning and traditional learning.

In conclusion, our interpretation of the obtained data revealed that students' attitudes towards online learning were greatly impacted by perceived usefulness and perceived ease of use, resulting in optimistic views towards studying online. Furthermore, the variances were also equal across groups in the interactions with the instructor. The high mean scores of male and female learners with M=4.23, SD=0.69 and M=3.90, SD=0.73, respectively, indicated that the two groups shared the same idea that although studying away from university, online learning still requires instructors to assist them in the courses.

## **DISCUSSION**

The aim of this study is to investigate students' perceptions towards online learning. Specifically, the paper seeks to examine how perceived usefulness and perceived ease of use influence students' opinions on e-learning. The research shows that e-learning has allowed English majors to enhance their ability to interact with others and be independent in managing their studies. The obtained data indicates that students are still able to interact very well with their classmates while learning online, which suggests that online learning does not hinder the exchange between students. This finding is similar to Barker's (1994) research, as cited in Song and McNary (2011), which highlights that interaction is fundamental and necessary for knowledge acquisition and cognitive development in the learning environment. Additionally, Malki et al.'s (2021) research agrees that online learning is more effective than classroom learning for discussions with classmates and other learners, indicating that students can still interact very well with each other even while studying online.

Moreover, the data suggests that when studying online, students have appropriate time planning to help them organize their time reasonably and avoid getting distracted by their surroundings. As noted in the research paper of Sari and Megayanti (2021), students have demonstrated self-discipline without teacher supervision during remote learning due to the COVID-19 epidemic. Therefore, online learning does not hinder students from communicating, interacting, and exchanging with each other, and learners can use mediation platforms to interact with lessons or other personal matters. Consequently, most scholars could discipline themselves to manage their time for daily activities in a reasonable and appropriate way.

The data obtained also indicates that English majors seek help from their lecturers when necessary and immediately notify them when unexpected problems occur. Thus, the lecturer's help is necessary in the online learning process. Similar to Wagner et al.'s (2008) study, multi-level interaction between students, teachers, and among students is beneficial for improving students' learning effects in online learning. Furthermore, the contact between teachers and students helps students develop the right learning attitudes and outcomes (Barker, 1994, as cited in Song & McNary, 2011). Therefore, the level of interaction between lecturers and scholars is crucial, especially in an online class, and both male and female students think that the interaction between lecturers and students is essential. Yang's (2002) research, as cited in Sun et al. (2022), also highlights that good interaction between learners and the instructor is one of the fundamental conditions for learning to occur in an online class. Additionally, the results show that teacher-student interaction is an important factor affecting the learning effects of students in online education, which further demonstrates the importance of the level of teacher-student interaction in online education, consistent with existing research. Contrary to Ansar et al.'s (2020) research, this study reveals that many English major students at a university have positive experiences towards online education, and both male and female students share their opinions in common.

In line with the hypothesis of Arkorful and Abaidoo (2015), findings show that most students agree there is a significant difference between online and traditional learning due to the flexibility. Elearning allows learners to access courses wherever they are, and flexible time is proven to be another benefit in this field (Suharno et al., 2023) since students at universities can save time traveling from their house or dormitory to the university for other purposes. Furthermore, distance education offers more convenience while studying at home, according to the majority of graduates, as affirmed by Moawad (2020). Many learners enjoy taking part in more online courses since they are equipped with enough facilities to learn online. Moreover, during the online studying process, students in this research have a chance to experience the two software Google Meet and Microsoft Teams, which assist them in their courses. Google Meet software appears to be mostly used compared to Microsoft's.

In summary, the study shows that distance learning provides many helpful values, and many students have optimistic ideas towards the studying method. This also explains how perceived usefulness and perceived ease of use significantly influenced learners' perceptions towards e-learning. Although English majors recognize diverse advantages from this method, a respectable number of students still prefer studying at university to learning from home, as agreed by Rakhmania (2020).

## CONCLUSION AND SUGGESTIONS

The purpose of this study is to explore the perceptions of English-majoring students at a university in the southern region of Vietnam towards online learning. The study focuses on perceived usefulness, perceived ease of use, and attitude towards use to identify the common and unique perceptions of male and female students on both positive and negative aspects of online learning. The research also highlights the learners' outstanding viewpoints on synchronous e-learning. The findings of the study indicate that the majority of students have a positive view towards online learning. The benefits of online learning include effective online communication with friends, time savings, and convenience when studying at home. However, some students still prefer traditional face-to-face learning due to

factors such as a lack of equipment or difficulty in concentrating. The role of the lecturer in guiding students in online courses is also essential.

The implications of the study suggest that the perspectives of students towards synchronous online learning should be considered when developing plans to promote online studying. The study recommends that widespread accessibility to the Internet should be encouraged, and finance should be raised to support high-quality online education at universities. Additionally, both lecturers and students must adjust to the shift from face-to-face instruction to online instruction. Teachers should participate in training sessions to enhance their online teaching abilities, and instructors should be encouraged to learn more about technology devices and applications that support online teaching, such as Microsoft Teams and Google Meet.

In conclusion, this study provides valuable insights into the attitudes of English major students towards online learning. The findings suggest that online learning can be a useful tool for advancing knowledge, methods, and abilities. However, it is essential to consider the advantages and disadvantages of online learning and to develop strategies that support effective online instruction.

## REFERENCES

Adams, D., Simpson, K., Davies, L., Campbell, C., & Macdonald, L. (2019). Online learning for university students on the autism spectrum: A systematic review and questionnaire study. *Australasian Journal of Educational Technology*, 35(6), 111–131. https://doi.org/10.14742/ajet.5483

Adnan, M. (2020). Online learning amid the COVID-19 pandemic: Students perspectives. *Journal of Pedagogical Sociology and Psychology*, 1(2), 45–51. https://doi.org/10.33902/jpsp.2020261309

Al-Adwan, A., Al-Adwan, A., & Smedley, J. (2013). Exploring students' acceptance of e-learning using Technology Acceptance Model in Jordanian universities. *International Journal of Education and Development using ICT*, 9(2), 4-18. Retrieved from http://ijedict.dec.uwi.edu//viewarticle.php?id=1617

Almaiah, M. A., Al-Khasawneh, A., & Althunibat, A. (2020). Exploring the critical challenges and factors influencing the E-learning system usage during COVID-19 pandemic. *Education and Information Technologies*, 25(6), 5261–5280. https://doi.org/10.1007/s10639-020-10219-y

Amiti, F. (2020). Synchronous and asynchronous E-learning. *European Journal of Open Education and E-Learning Studies*, 5(2), 60-69. http://dx.doi.org/10.46827/ejoe.v5i2.3313

Ansar, F., Ali, W., Khattak, A., Naveed, H., & Zeb, S. (2020). Undergraduate students' perception and satisfaction regarding online learning system amidst COVID-19 Pandemic in Pakistan. *J Ayub Med Coll Abbottabad*, 32(4), 644-650. Retrieved from https://demo.ayubmed.edu.pk/index.php/jamc/article/view/8520

Arkorful, V., & Abaidoo, N. (2015). The role of e-learning, advantages and disadvantages of its adoption in higher education. *International journal of instructional technology and distance learning*, 12(1), 29-42. Retrieved from https://www.itdl.org/Journal/Jan\_15/Jan15.pdf#page=33

Bell, B. S., & Federman, J. E. (2013). E-Learning in Postsecondary Education. *The Future of Children*, 23(1), 165–185. http://www.jstor.org/stable/23409493

Bower, M. (2019). Technology-mediated learning theory. *British Journal of Educational Technology*, 50(3), 1035-1048. https://doi.org/10.1111/bjet.12771

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. https://doi.org/10.1287/mnsc.35.8.982

- DeBourgh, G. A. (2003). Predictors of student satisfaction in distance-delivered graduate nursing courses: what matters most? *Journal of Professional Nursing*, 19(3), 149–163. https://doi.org/10.1016/s8755-7223(03)00072-3
- Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, 49(1), 5–22. https://doi.org/10.1177/0047239520934018
- Ferri, F., Grifoni, P., & Guzzo, T. (2020). Online Learning and Emergency Remote Teaching: Opportunities and Challenges in Emergency Situations. *Societies*, 10(4), 2–18. https://doi.org/10.3390/soc10040086
- Gonzales, A. L., McCrory Calarco, J., & Lynch, T. (2018). Technology Problems and Student Achievement Gaps: A Validation and Extension of the Technology Maintenance Construct. *Communication Research*, 47(5), 750–770. https://doi.org/10.1177/0093650218796366
- Gousiou, A., & Grammenos, N. (2023). Informatics and ICT as Learning Subjects in Primary and Secondary Education in Greece. *Anatolian Journal of Education*, 8(1), 217–230. https://doi.org/10.29333/aje.2023.8115a
- Ha, G. L., & Ngo, T. C. T. (2021). Challenges in learning listening comprehension via Microsoft Teams among English majors at Van Lang University. *International Journal of TESOL & Education*, *1*(3), 142–175. Retrieved from https://i-jte.org/index.php/journal/article/view/36
- Hermanto, Y. B., & Srimulyani, V. A. (2021). The challenges of online learning during the covid-19 pandemic. *Jurnal Pendidikan Dan Pengajaran*, *54*(1), 46-57. http://dx.doi.org/10.23887/jpp.v54i1
- Hubackova, S. (2015). History and Perspectives of Elearning. *Procedia Social and Behavioral Sciences*, 191 (2015), 1187–1190. https://doi.org/10.1016/j.sbspro.2015.04.594
- Jónasson, J. (2001). On-line distance education a feasible choice in teacher education in Iceland. Unpublished master's thesis. *University Strathclyde, Glasgow, UK*. Retrieved from https://notendur. hi. is/jonjonas/skrif/mphil/thesis. pdf
- Khalil, R., Mansour, A. E., Fadda, W. A., Almisnid, K., Aldamegh, M., Al-Nafeesah, A., Alkhalifah, A., & Al-Wutayd, O. (2020). The sudden transition to synchronized online learning during the COVID-19 pandemic in Saudi Arabia: a qualitative study exploring medical students' perspectives. *BMC Medical Education*, 20(1), 1-10. https://doi.org/10.1186/s12909-020-02208-z
- Khorsheed, R., Deeb, S., & Dahhan, R. A. (2021). University Students' Attitudes Towards Online English Postgraduate Programs. *Theory and Practice in Language Studies*, 11(6), 688–694. https://doi.org/10.17507/tpls.1106.13
- Khusniyah, N. L., & Hakim, L. (2019). Efektivitas pembelajaran berbasis daring: sebuah bukti pada pembelajaran bahasa inggris. Jurnal Tatsqif, 17(1), 19–33. https://doi.org/10.20414/jtq.v17i1.667
- Le, T. A. T., Vodden, K., Wu, J., & Atiwesh, G. (2021). Policy responses to the COVID-19 pandemic in Vietnam. *International Journal of Environmental Research and Public Health*, *18*(2), 1-32. https://doi.org/10.3390/ijerph18020559
- Loomis, K. D. (2019). Learning Styles and Asynchronous Learning: Comparing the LASSI Model to Class Performance. *Online Learning*, 4(1). https://doi.org/10.24059/olj.v4i1.1908
- Mahyoob, M. (2020). Challenges of e-Learning during the COVID-19 Pandemic Experienced by EFL Learners. *Arab World English Journal*, 11(4), 351–362. https://doi.org/10.24093/awej/vol11no4.23
- Moorhouse, B. L. (2020). Adaptations to a face-to-face initial teacher education course 'forced' online due to the COVID-19 pandemic. *Journal of Education for Teaching*, 46(4), 609–611. https://doi.org/10.1080/02607476.2020.1755205

Nandi, D., Hamilton, M., & Harland, J. (2012). Evaluating the quality of interaction in asynchronous discussion forums in fully online courses. *Distance Education*, *33*(1), 5–30. https://doi.org/10.1080/01587919.2012.667957

- Narang, U., Yadav, M. S., & Rindfleisch, A. (2021). The "Idea Advantage": How Content Sharing Strategies Impact Engagement in Online Learning Platforms. *Journal of Marketing Research*, 59(1), 61–78. https://doi.org/10.1177/00222437211017828
- Njeguš, A. (2022). University Students' Experiences and Attitudes Toward Online Learning During the Pandemic Covid-19. In *Sinteza 2022-International Scientific Conference on Information Technology and Data Related Research* (pp. 137-143). Singidunum University. https://doi.org/10.15308/sinteza-2022-137-143
- Park, S. Y. (2009). An analysis of the technology acceptance model in understanding university students' behavioral intention to use e-learning. *Journal of Educational Technology & Society*, 12(3), 150-162. https://doi.org/10.1111/j.1467-8535.2011.01229.x
- Picault, J. (2021). Structure, Flexibility, and Consistency: A Dynamic Learning Approach for an Online Asynchronous Course. *Applied Economics Teaching Resources*, *3*(4), 30-43. https://doi.org/10.22004/ag.econ.316503
- Pilli, A. O., Fanaeian, A. Y., & Al-Momani, M. M. (2014). Investigating the students' attitude toward the use of e-learning in Girne American University. *International Journal of Business and Social Science*, 5(5), 169-175. Retrieved from https://ijbssnet.com/view.php?u=https://www.ijbssnet.com/journals/Vol\_5\_No\_5\_April\_2014/19.pdf
- Radha, R., Mahalakshmi, K., Kumar, V. S., & Saravanakumar, A. R. (2020). E-Learning during lockdown of Covid-19 pandemic: A global perspective. *International journal of control and automation*, 13(4), 1088-1099. Retrieved from http://sersc.org/journals/index.php/IJCA/article/view/26035
- Rafiq, F. (2020). Analyzing Students' Attitude towards E-Learning: A Case Study in Higher Education in Pakistan. *Pakistan Social Sciences Review*, 4(1), 367–380. https://doi.org/10.35484/pssr.2020(4-i)29
- Rahman, H. (2009). Collaborative Learning: An Effective Tool to Empower Communities. *International Journal of Information Communication Technologies and Human Development (IJICTHD)*, 1(2), 1-27. http://doi.org/10.4018/jicthd.2009040101
- Rakhmanina, L., Martina, F., Halolo, F. B., Syafryadin, S., & Noermanzah, N. (2021). Students' Perception on Online English Learning during Covid-19 Pandemic Era. *Silampari Bisa: Jurnal Penelitian Pendidikan Bahasa Indonesia*, *Daerah*, *Dan Asing*, *3*(2), 428–439. https://doi.org/10.31540/silamparibisa.v3i2.1150
- Saikat, S., Dhillon, J. S., Wan Ahmad, W. F., & Jamaluddin, R. A. (2021). A Systematic Review of the Benefits and Challenges of Mobile Learning during the COVID-19 Pandemic. Education Sciences, 11(9), 459. https://doi.org/10.3390/educsci11090459
- Sari, M., Ilhamdaniah, & Megayanti, T. (2021). Time Management During Covid-19 Pandemic. Proceedings of the 6th UPI International Conference on TVET 2020 (TVET 2020). https://doi.org/10.2991/assehr.k.210203.082
- Skylar, A. A. (2009). A comparison of asynchronous online text-based lectures and synchronous interactive web conferencing lectures. *Issues in Teacher education*, *18*(2), 69-84. Retrieved from https://files.eric.ed.gov/fulltext/EJ858506.pdf

- Song, D., & Bonk, C. J. (2016). Motivational factors in self-directed informal learning from online learning resources. *Cogent Education*, *3*(1), 1205838. https://doi.org/10.1080/2331186x.2016.1205838
- Song, L., & McNary, S. W. (2011). Understanding Students' Online Interaction: Analysis of Discussion Board Postings. *Journal of Interactive Online Learning*, *10*(1). Retrieved from https://www.ncolr.org/issues/jiol/v10/n1/understanding-students-online-interaction-analysis-of-discussion-board-postings.html
- Staddon, R. V. (2023). Exploring Higher Education Students' Perspectives on Factors Affecting Use, Attitudes and Confidence with Learning Technologies. *International Journal of Instruction*, 16(2), 31–52. https://doi.org/10.29333/iji.2023.1623a
- Sun, H.-L., Sun, T., Sha, F.-Y., Gu, X.-Y., Hou, X.-R., Zhu, F.-Y., & Fang, P.-T. (2022). The Influence of Teacher–Student Interaction on the Effects of Online Learning: Based on a Serial Mediating Model. Frontiers in Psychology, *13* (779217), 1-10, https://doi.org/10.3389/fpsyg.2022.779217
- Suharno, S., Suherdi, D., & Gunawan, W. (2023). The Effects of Teaching Presence on Students' Motivation and Performance in A Long-term Online Gamified EFL Listening Course. *International Journal of Instruction*, 16(2), 1111–1134. https://doi.org/10.29333/iji.2023.16259a
- Tedja, J. N. (2020). The implementation of distance learning policy during the COVID-19 pandemic. *Indonesian Journal of Digital Society*, 1(2), 18-28. Retrieved from http://journal.unas.ac.id/sosiologiiids
- Valentine, D. (2002). Distance learning: Promises, problems, and possibilities. *Online journal of distance learning administration*, 5(3), 1-11. Retrieved from https://ininet.org/distance-learning-promises-problems-and-possibilities.html
- Vitoria, L., Mislinawati, M., & Nurmasyitah, N. (2018, September). Students' perceptions on the implementation of e-learning: Helpful or unhelpful?. In *Journal of Physics: Conference Series* (Vol. 1088, No. 1, p. 012058). IOP Publishing. https://doi.10.1088/1742-6596/1088/1/012058
- Wagner, N., Hassanein, K., & Head, M. (2008). Who is responsible for e-learning success in higher education? A stakeholders' analysis. *Journal of Educational Technology & Society*, 11(3), 26-36. Retrieved from https://www.j-ets.net/collection/published-issues/11\_3
- Wang, C.-H., Shannon, D. M., & Ross, M. E. (2013). Students' characteristics, self-regulated learning, technology self-efficacy, and course outcomes in online learning. *Distance Education*, *34*(3), 302–323. https://doi.org/10.1080/01587919.2013.835779
- Yilmaz, A. B. (2019). Distance and Face-To-Face Students' Perceptions Towards Distance Education: A Comparative Metaphorical Study. *Turkish Online Journal of Distance Education*, 20(1), 191–207. https://doi.org/10.17718/tojde.522705
- Yousaf, F., Rafique, S., & Mahmood, S. (2021). Students Attitude towards Online Classes at Undergraduate Level. *Review of Applied Management and Social Sciences*, 4(2), 447–458. https://doi.org/10.47067/ramss.v4i2.145
- Yuhanna, I., Alexander, A., & Kachik, A. (2020). Advantages and disadvantages of Online Learning. *Journal Educational Verkenning*, 1(2), 13–19. https://doi.org/10.48173/jev.v1i2.54