AsiaCALL
The Asia Association of Computer Assited Language Learning

AsiaCALL Online Journal

January 2022, Volume 13, Issue 1

ISSN 1936-9859

https://asiacall.info

https://asiacall.info/acoj

ASIACALL
The Asia Association of Computer Assisted Language Learning

AsiaCALL Online Journal (acoj)
ISSN: 1936-9859
Vol. 13 No. 1 (2022): January 2022, Volume 13, Issue 1

Indexed in

Google Scholar
Crossref
DOI
LOCKSS
CLOCKSS
PKP PN
Library of Congress, U.S. ISSN Center
ROAD
EuroPub
The Standard Periodical Directory
ICI World of Journals
CiteFactor
Real-Time Impact Factor
EOI
J-Gate
Mendeley

Publisher: Asia Association of Computer-Assisted Language Learning

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AsiaCALL Online Journal

Vol. 13 No. 1 (2022): January 2022, Volume 13, Issue 1

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Vol. 13, No. 1 (2022): January 2022, Volume 13, Issue 1
Published: 2022-01-29

AsiaCALL Online Journal
ISSN 1936-9859; https://asiacall.info/acoj
Vol. 13, No. 1, 2022
pp. 1-21

Received: 15/10/2021
Revision: 02/11/2021
Accepted: 05/11/2021
Online: 13/11/2021

Remote Teaching amid the Covid-19 Pandemic in Vietnam: Primary School EFL Teachers' Practices and Perceptions

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EOI: http://eoi.citefactor.org/10.11251/acoj.13.01.001

Abstract

The massive school closures worldwide due to the Covid-19 pandemic have resulted in a surge of remote teaching. This study investigated teachers' practices and perceptions on teaching English remotely to primary school students in the school lockdowns in Vietnam. A mixed-methods design was employed to collect data from different primary public schools in Ho Chi Minh City, Binh Duong and Dong Nai provinces. Ten semi-structured interviews were conducted, and a questionnaire was used to collect data from 50 teachers. The majority of selected participants were those who practiced at least one form of remote teaching activities, either asynchronous or synchronous. The findings show that Zoom, Zalo, and YouTube were the three most popular platforms teachers used. Numerous challenges also emerged, such as more workload, more stress, technical issues, students' lack of learning devices, the requirement for parent's assistance, more interactions, and hands-on activities. Despite the obstacles, the majority of teachers showed their positive attitudes towards remote teaching. They learned new ICT tools and pedagogies and intended to continue using this approach after the pandemic. In order to improve the effectiveness of remote teaching, such suggestions as creativity and flexibility in designing lessons, parents' support, teacher's training, and upgraded ICT infrastructure are recommended.

Keywords: remote teaching, perceptions, challenges, primary school teachers, pandemic

1. Introduction

The Covid-19 pandemic has created the worst crisis in education, where schools for over 168 million children worldwide have been suspended for roughly a year (United Nations International Children's Emergency Fund [UNICEF], 2021). As a majority of the world's schoolchildren, primary school students have accounted for the most among those who missed at least three-quarters of classroom instruction (UNICEF, 2021). School closures due to the Covid-19 have resulted in a dramatic change in education with the rapid growth of e-learning, in which teaching takes place remotely and via media platforms. As cited in UNICEF (2021), the data showed that more than 90% of education ministries around the world had introduced some types of remote learning through radio, television, or the Internet. The Ministry of Education and Training of Vietnam (MOET), in particular, quickly guided

schools to implement remote learning via the Internet or on television in order to ensure the continuity of learning for students. In a virtual meeting with UNICEF's representatives in 2020, Minister Phung Xuan Nha emphasized that although remote teaching was a temporary action responding to the Covid-19 pandemic, this would be an opportunity for the acceleration of digital transition in the education sector (UNICEF Vietnam, 2020). As a result, it is vital to understand what happened in the time when "teaching is moving online, on an untested and unprecedented scale" (Burgess & Sievertsen, 2020) so that the education sector will be able to identify future directions and prepare for unavoidable situations.

In the world, there have been several studies on remote teaching of tertiary level during the Covid-19 pandemic. However, scant research has investigated this emergency remote teaching to the primary level, where students need more support from teachers and parents. An examination is especially necessary for teaching subjects like the English language, which requires more interactions between teachers and students or students and students. Therefore, there is an urgent need for research into teachers' attitudes towards teaching English remotely to primary school children, the obstacles they meet when delivering remote learning sessions, and what to do to improve this teaching approach to young learners**.** This study attempts to address the issues as mentioned above through an investigation with primary English teachers in Vietnam, where nationwide schools were closed twice in the academic year 2020 - 2021. The first closure was from February to April 2020, and the second time happened in February 2021.

2. Literature review

2.1 E-learning

Being considered as a modern tool to handle the issues occurring in the teaching and learning process (Agustina & Cahyono, 2017), e-learning (Electronic learning) has emerged as a new trend in education and is now widely regarded as the most significant learning paradigm, particularly in the wake of the Covid-19 outbreak, when people are advised to avoid crowds and practice social distancing as pandemic prevention strategies (Mardiah, 2020). Arkorful and Abaidoo (2014) refer to e-learning as the use of information and communication technologies (ICTs) to allow access to online learning or teaching resources. Goyal (2012) also listed a number of terms used to define this form of teaching and learning, including online learning, virtual learning, distributed learning, network, and web-based learning. In this research, the term "e-learning" refers to any form of electronically supported learning, whether on the Internet or television, in which the student interacts with teachers, contents, and other students regardless of location or time (Kisanga, 2016).

In general, there are two types of e-learning activities: asynchronous and synchronous. The asynchronous events take place at any time through media platforms such as email and discussion boards, where students can learn at their own time and pace. Conversely, synchronous activities occur through live video conferencing and chat, in which teachers and learners interact with each other in real-time (Hrastinski, 2008). Table 1 is adapted from Kim, 2020.

Table 1. Asynchronous and synchronous learning

	Asynchronous	**Synchronous**
Timing	Logging in at own time Learning at own pace	Logging in at the same time
Communication	Posting responses to activities Reading and writing feedback	Live interactions Talking back or forth within a group
Examples of tools	E-mail, discussion board (ex. Google Docs, Blackboard, YouTube)	Video conference tools (e.g., Google Hangout, Blackboard Collaborate, Zoom Meeting)
Role of teachers	Setting up discussion boards Facilitator between students	Instructor Interacting with students

E-learning has been proven to bring learners, teachers, and educational organizations many benefits. In terms of cost-effectiveness, online courses efficiently dispense with numerous expenditures that are operating a brick-and-mortar class incurs such as space, classroom facilities, and staff, offering a large number of students in one class without many building space requirements (Arkorful & Abaidoo, 2014; Kim 2020). In addition, e-learning eases time constraints and geographical boundaries where every student or teacher has options of choosing the location and time that is most convenient for him or her (Arkorful & Abaidoo, 2014; Chitra & Raj, 2018). Material comprehension skills are also improved because students have more time to comprehend a message in asynchronous activities, which allow self-pacing among students (Hrastinski, 2008; Mardiah, 2020). To young learners, ICTs play an important role in their learning. Specifically, ICTs promote children's language development in language learning because most children enjoy the Internet, television, radio, YouTube videos, and mobile learning applications (Dewi, 2019). Dewi (2019) also confirmed the significant role of ICTs in eliciting students' creativity and proficiency in both local and international cultures.

Regarding the effectiveness of online learning, Montiel-Chamorro (2018) found that there are no statistically significant differences in the outcomes or overall scores of students when comparing two online classes with two face-to-face classes in his investigation at a university in Colombia. The finding is in line with that of Russell (1999), as cited in Nguyen (2015), when he compiled over 350 studies on distance and online education dating back from 1928. Students in online learning environments even performed modestly better than those receiving face-to-face training, according to the meta-analysis of the U.S. Department of Education (2010). Despite the positive results for the efficacy of online learning, it is uncertain if this holds true through investigations (Nguyen, 2015), and there was no evidence that online learning is a superior learning approach when it lacks vital personal interactions (Arkorful & Abaidoo, 2014). Especially, the findings may not be generalizable to K-12 settings where there are still few thorough studies (Nguyen, 2015).

2.2 Implementation of E-learning in primary schools in Vietnam

According to Austrade (2020) in the Vietnam Edtech Scoping Study Report, e-learning was introduced in Vietnam in 2007, and the Ministry of Education and Training (MOET) has worked relentlessly in order to completely bring the Internet to the sector and boost the implementation of ICTs in management, teaching and learning activities. To this end, a number of measures to increase the use of ICT in the classroom have been implemented, such as developing ICT facilities, training ICT skills for teachers, and adjusting pedagogical curriculum (Peeraer & Petegem, 2011 and Pham, 2014, as cited in Pham and Lee, 2019), and looking for sponsorship from private sectors and partnerships such as Microsoft and Viettel (Truong, 2020). As a result, all areas of education are projected to implement ICT in their curriculum, pedagogical, and training activities (Truong & Qalati, 2020). Regarding primary education in Vietnam, computer science, as a selective subject, is embedded in the curriculum of grades 4 and 5. Therefore, students have opportunities to be exposed to ICT in class. However, according to Nguyen et al. (2017), students mainly access the Internet from home because the Internet penetration is increasing rapidly due to the proliferation of smartphones and 3G subscriptions in households. There is still a big difference in pedagogical practice and teaching resources between rural and urban areas due to the current infrastructure and teaching competency, in which just 17% of students in remote mountainous areas have access to the Internet (Truong, 2020). Moreover, teachers in urban areas have opportunities to attend numerous training workshops while their counterparts receive less (Nguyen et al., 2017).

Although access to ICT is not a barrier anymore and teachers have good basic ICT skills, the majority of primary English teachers in Vietnam are low-level users (Huynh & Pham, 2018). Teachers still lack confidence in applying ICT in teaching, and they mostly use ICT as a replacement for their teaching activities (Peeraer & Petegem, 2011). Many researchers also claimed that Vietnamese teachers usually use common applications like word processors, PowerPoint presentations, search engines, images, audio, and the use of more advanced applications which engage students in learning is low (Peeraer & Petegem; 2011; Dang, 2013, Huynh & Pham, 2018). When choosing the ICT tools for teaching, teachers consider the lesson objectives, the availability, and accessibility of the tool, the learners' needs, and the level of familiarity (Truong & Qalati, 2020).

In connection with teachers' perceptions on applying ICT in English language teaching to young learners in Vietnam, teachers recognize a variety of benefits such as getting more comfortable in teaching, increasing critical thinking, promoting teaching and learning, and facilitating problem-solving while they also admit this is a time-consuming approach (Truong & Qalati, 2020). A number of factors that hinder teachers in ICT implementation include the absence of collaboration among teachers and students, inadequate technological knowledge, lack of leaders' support and a shortage of qualified teachers (Truong & Qalati, 2020), lack of ICT facilities, time, and money, too much content curriculum, oversized classes, lack of support from colleagues, technical staff and leaders, low internet connection (Huynh & Pham, 2018; Pham, Tan and Lee, 2019). To tackle these problems, Pham, Tan, and Lee (2019) emphasized the significant role of MOET in providing training for teachers and efficiently allocating budget for supply and maintenance of ICT infrastructure in schools, allowing a lighter and more flexible curriculum and encouraging teachers to share ideas and experience to others. Nguyen et al. (2017) also highlighted the urgent need for MOET and educators in the country to upgrade ICT facilities in classrooms and revise school curriculum and improve

teachers' ICT skills. Truong and Qalati (2020) again indicated the government's role in organizing online and offline training workshops for new teachers.

2.3 Challenges in the emergency remote teaching due to the Covid-19 pandemic

Hodges et al. (2020) defined emergency remote teaching as "a temporary shift of instructional delivery to an alternate delivery model due to crisis circumstances". Responding to the Covid-19 pandemic, the education sector witnessed frustrations arising from a lack of knowledge about what to do and how to cope with situations that educators or teachers had never encountered before (Kim, 2020). Due to the pandemic, the quick switching to online teaching meant that several teachers were simply trying to survive by turning what had been planned for a normal face-to-face class into an online format Todd (2020). Mardiah (2020) found that this shifting is not effective in actual practices. This conclusion was in line with Rahayu and Wirza (2020) when they indicated online learning is not practical.

Many obstacles plagued remote teaching emergencies. Teachers expressed their rational worries about the Internet and technology, which did not always function when teaching or learning remotely (Hoang & Le, 2021; Cardullo et al., 2021). Unstable internet connection not only had a major impact on students' listening process (Ha & Ngo, 2021) but also consumed much time in handling the logging in and out of students or uploading teaching materials (Hoang & Le, 2021). Teachers also worried about the difficulties of equity and their concerns about social engagement and peer relations (Cardullo et al., 2021). In terms of teachers' ICT competence, Hoang and Le (2021) found that the majority of teachers in their study were not confident in technology skills. Teachers' fear of ICT in remote teaching resulted in an unwillingness to employ complicated platforms (Ly et al., 2021). In addition, Yi and Jang (2020) argued that remote teaching in the pandemic had changed teaching practices and experiences, which require teachers to be more creative and collaborative in instructions and to perform more roles such as video makers in designing lesson plans. Hoang and Le (2021) also disclosed that re-designing teaching and learning activities, preparing online learning resources, and supporting students brought teachers heavy workload during the pandemic. Yang (2020) added the inability of students to apply self-study skills, the difficulty in managing students' progress, and lack of interactions as factors affecting online learning.

Teaching remotely is more challenging when working with young students. When exploring the practices of the *School from Home* program designed for primary teachers in Indonesia during the pandemic, Rasmitadila et al. (2020) divided difficulties teachers faced into four subcategories including technical obstacles, student's conditioning, the participation of students, and online teaching experience. As technical issues are concerned, not all parents have smartphones or laptops, and the Internet signals are poor, especially in the rural areas. Consequently, students cannot follow the lessons and delay doing assignments. In addition, the process of studying at home for students is distracted by internal factors such as interference from family members and external factors such as the fact that students talk to each other on different topics. Another challenge is that participation is limited due to low data packages, the ownership of smartphones or laptops, and losing motivation which demands teachers to find ways to maintain student's enthusiasm in virtual classes. In addition, teachers who have no experience in teaching online or who are not tech-savvy will find it difficult to run online learning because the *School from Home* program requires them to master a number of applications such as WhatsApp, Google Forms, Worksheets, YouTube, Zoom, Google Classroom and PowToon. According to Kim (2020), limitations of online

learning vary depending on the technological ability of teachers and students to access the Internet or to use computers. Especially more efforts have to be put on working with young learners who require adult availability and involvement in supervising or assisting them with technical skills (Kim, 2020; Cardullo et al., 2021). Misirli and Ergulec (2021) also found that parents of young learners (pre-school and primary school) joined the learning process as a technical assistant and a class participant as well. Moreover, online learning can easily lose children's focus because they need more interaction and hands-on activities (Kim, 2020). Rhayu and Wirza (2020) added that some teachers struggled with using ICT, creating engaging content, explaining it as well as giving feedback and assessment. Besides, Cardullo et al. (2021) were also concerned about the vast disparities among children from the rich and underprivileged families.

Still, from teachers' perspectives, they were willing to support and motivate students, trying to create learning opportunities for the good of learners in these unprecedented situations (Cardullo et al., 2021). Despite a number of challenges emerging, several studies found teachers' positive attitudes towards online teaching, and these teachers looked for support where necessary and tried to apply various methods (Todd, 2020; Rahayu & Wirza, 2020; and Hoang & Le, 2021). Many teachers admitted that the technical skills of both students and teachers were improved from teaching and learning online (Cardullo et al., 2021; Tunmibi, Aregbesola, Adejobi, and Ibrahim, 2015). Irene van der et al. (2020) also found teachers' intention in integrating ICT in their teaching more often once they get back to a normal face-to-face class. The fact that the teachers' intention to implement technology in teaching and their pretty high involvement in it indicate their awareness of the importance of technology in online teaching (Rahayu & Wirza, 2020).

2.4 Research Questions

In order to get concrete results, this study is guided by the following questions:

1. What tools or platforms do teachers use to operate teaching and learning during the school closures?
2. What obstacles do teachers face when delivering remote lessons?
3. What are teachers' perceptions on facilitating remote teaching to primary school students?

3. Methods

3.1 Pedagogical Setting & Participants

In order to investigate the practices and the perceptions of teachers on the sudden shift to teaching English remotely due to the Covid-19 pandemic, this study targeted at different primary public schools in Ho Chi Minh City, Binh Duong and Dong Nai provinces, where various types of remote teaching were implemented during the school lockdowns in the academic year 2020-2021. The majority of selected participants were those who used at least one form of asynchronous or synchronous remote instruction. A questionnaire was sent to the participants via Google Forms with 50 valid answers collected, and 10 semi-structured interviews were also conducted via phones at the same time. The teachers who participated in

the interviews were randomly selected from six different schools, and they were also among those who answered the questionnaire.

39 (78%) survey respondents are young teachers aged 22-34, 9 (18%) aged 35-42 and 2 (4%) aged 43-59. Interestingly, 21 (42%) teachers have experience in conducting remote teaching activities for less than 1 year, the same number as those who have from 1 to 3 years. No one has more than three years of remote teaching, and the number of teachers who have not conducted any remote teaching event is only 8 (16%).

3.2 Design of the Study

This study employed a mixed-methods design to gather, analyze and combine both quantitative and qualitative data in order to better comprehend the research questions than using either approach alone (Cresswell, 2012). The reasons for combining methods are that neither quantitative nor qualitative methods are adequate to catch the tendencies and facts of a situation on their own (Ivankova, 2007). In this study, a questionnaire was used to collect quantitative data and ten semi-structured interviews were used to collect qualitative data. The quantitative scores on the questionnaire from a larger population compensated for the shortcomings of the qualitative data of a few interviews (Cresswell, 2012). On the other hand, the qualitative data gave more detailed information about the interview setting and an in-depth understanding of the research problems.

Based on the design types of Cresswell (2012), the convergent parallel design was applied in the study, in which data of both quantitative and qualitative methods was simultaneously collected, analyzed separately, then compared and interpreted.

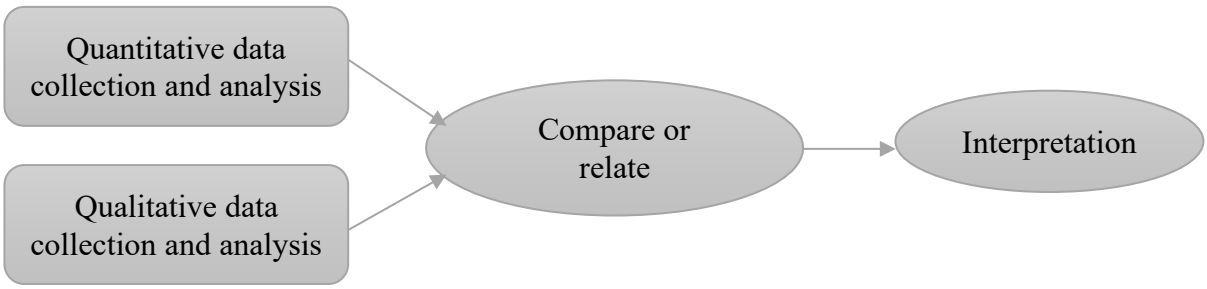

Figure 1. The convergent parallel design, adapted from Cresswell, 2012

3.3 Data collection & analysis

The data was collected by two instruments: a survey questionnaire and a semi-structured interview, both in the Vietnamese language. The questionnaire, which was adapted from Vu et al. (2020) and Cardullo et al. (2021), comprised items of two different formats: the multiple-choice and the questions of 5-point Likert scale from "Strongly disagree" to "Strongly agree". The questionnaire contained thirty questions divided into two main sections. The first section asked for teachers' demographic information such as gender, ages, online teaching experience, and one item of ICT tools for teaching was also included in this part. The second section measured teachers' perceptions on conducting remote teaching activities during the Covid-19 school closures. The second section was also divided into five subsections to fully answer the research questions: (1) teachers' perceived challenges in their

remote teaching practices, (2) reasons for not conducting online classes, (3) teachers' perceived ICT competence, (4) teachers' suggestions to improve remote teaching, and (5) teachers' intentions to remote teaching after the pandemic. After collecting data, the author used the software SPSS 20. to conduct a reliability test for the variables in the questionnaire, including six items of "perceived challenges", four items of "reasons not conducting online teaching", six items of "ICT competence", four items of "suggestions" and three items of "intentions" variables. According to Wim et al. (2008), as cited in Hajjar (2018), a value of Cronbach's alpha between 0.6 and 0.8 is acceptable. The results showed that most variables satisfied this value range, except the value of variable "perceived challenges" with only 0.442. Consequently, the item "Students enjoy learning" was removed from "perceived challenges" so that Cronbach's value of these variables reached 0.698. As the questionnaire was considered as well constructed, descriptive statistics were used to describe the teachers' opinions on the measurements.

The interview questions consisted of nine open-ended questions relating to teachers' overall perceptions on remote teaching to primary school students, how they facilitated remote teaching activities during the school closures, the effectiveness of these activities, challenges they faced, recommendations and future intentions to remote teaching and learning practices. The ten participants were coded from T1 to T10, and the data were categorized and put in a matrix format for easy analysis.

4. Findings and discussion

4.1. Tools/ platforms used for remote teaching and learning.

In light of numerous applications or platforms available in the market for remote teaching, and some of them are free, some are premium, the participants were asked to mention the tools they used to facilitate their remote teaching during the school closures. Figure 2 depicts the results from the survey.

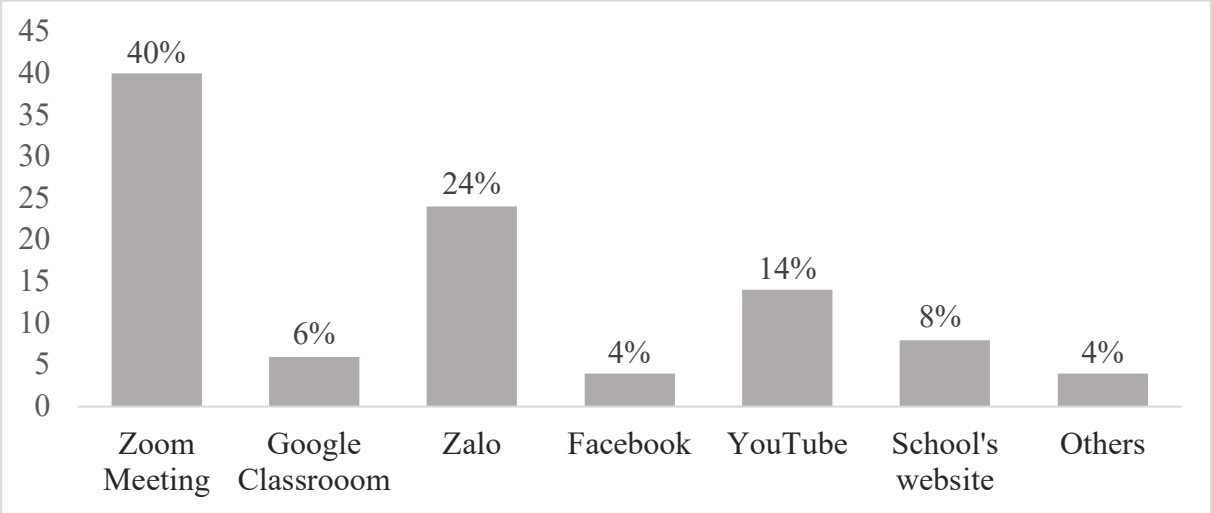

Figure 2. Tools/platforms used in teaching during the Covid-19 school closures

As evident in figure 2, Zoom Meeting was the most common tool for remote teaching in Ho Chi Minh City, Binh Duong and Dong Nai provinces (40% of users), followed by Zalo (24%),

and YouTube (14%). Just a few teachers used Google Classroom, Facebook, and the school's website, and nobody used television for their teaching activities.

Similarly, in the interviews, Zoom Meeting, Zalo, and YouTube were also the three most popular platforms that teachers mentioned to organize their remote teaching in the Covid-19 pandemic. These applications are free, and Zalo, which is used widely in Vietnamese households (Chapman, 2019) is considered as the best way to connect with students. Many teachers organized asynchronous teaching activities in which they recorded their video lessons and later shared them with their students via YouTube or Zalo groups. T3 had his video lessons posted on the school's website. In addition, a few teachers used other platforms such as Google Meet and Facebook to create remote learning activities. Noticeably, teachers employed engaging applications such as Google Forms, Quizizz, and Kahoot to motivate students as well as check their understanding.

4.2. Teachers' perceived challenges in teaching English remotely to primary school students

In this part of the questionnaire, teachers were asked to rate their agreement on the obstacles they got when organizing remote teaching activities. As mentioned in the methodology part, the item "*Students enjoy learning*" was removed from this group of variables to make the questionnaire more reliable. Figure 3 below shows retained variables.

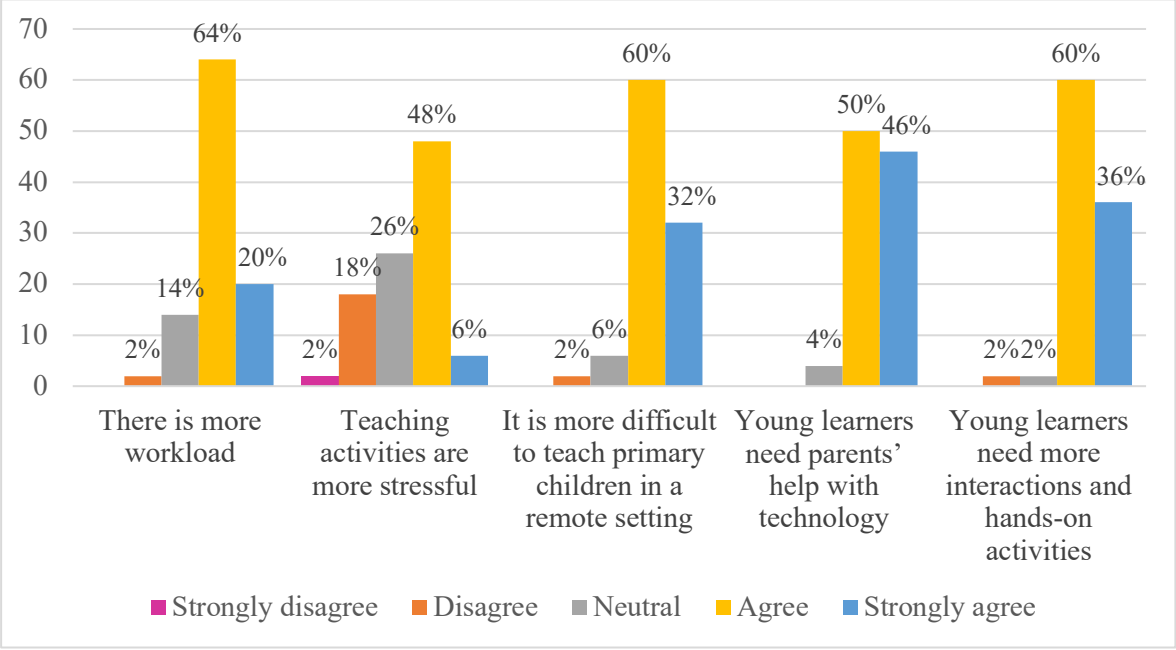

Figure 3. Teachers' perceived challenges

The results show that the majority of teachers agreed with the obstacle statements in the questionnaire with high rates. The two biggest problems were that young learners need parents' help with technology and young learners need more interactions and hands-on activities (96% of the agreement for each). These findings were consistent with those of Kim (2020) when the teachers in her study stated that they needed to create more interacting and hands-on activities such as singing, dancing, cutting, drawing, and creating patterns. 92% of teachers also agreed that it is more difficult to teach primary children in a remote setting

compared to older students. In line with the finding of Hoang and Le (2021), teachers in this study revealed that there is more workload (84%), and teaching activities are more stressful (54%).

Furthermore, numerous challenges emerged from the interviews. In accordance with the findings of Rasmitadila et al. (2020), 70 % (seven teachers) had the similar comment that many students did not have their own computers, laptops or smartphones. These students had to use their parent's devices but their parents went to work all day without leaving their gadgets at home. This was a big problem for teachers when they had to depend on parents' schedules to organize the lessons for students. According to T8, "*teachers even have to schedule the same lesson two or three times a day for different groups of students whose parents work in different shifts in the factories*". Many teachers agreed that due to a lack of parents' time and assistance, the number of students joining online classes was not high. "*This causes a big gap in knowledge among students, and teachers have to review the lessons when students get back to face-to-face class*," as T5 revealed. "*Most parents are factory workers, they lack ICT ability to assist their children's learning*" (T1), "*they don't know how to sign in online learning platforms*" (T7). "*Some of the parents do not care about their children's study*" (T6).

Considering the difficulties arising from students, many teachers reported that primary school students were still too young. "*They do not know all the functions of the online learning apps so their performance is slow*" (T4). In addition, T8 said that "*children's self-learning ability is low*", similarly to Yang (2020)'s findings about the inability of students in self-study at home during the Covid-19 lockdowns. *"Young students easily lose their focus or fall asleep due to lack of interactions*" (T10). T8 also complained that many students chatted to each other about different topics.

Regarding teachers' limitations, a few teachers admitted that they were not proficient in some ICT tools which they learnt from the Internet, so they did not understand or fully exploited the functions (T8 &T10). This finding is consistent with that of Ly et al. (2021) when they found that some teachers had a fear of complicated ICT tools. A few teachers in this study felt pressured and embarrassed when making video lessons because they lacked confidence in front of the camera and making videos required more time, workload and creativity (T8, T9 & T10). This finding corroborates those of Yi and Jang (2020) when they confirmed that remote teaching requires teachers to be creative, collaborative and to perform more roles such as video makers.

4.3. Teachers' perceived reasons for not conducting synchronous online classes

In this part of the questionnaire, teachers were asked to give their reasons for not conducting synchronous online classes. These reasons are also considered as difficulties hindering teachers in organizing online teaching.

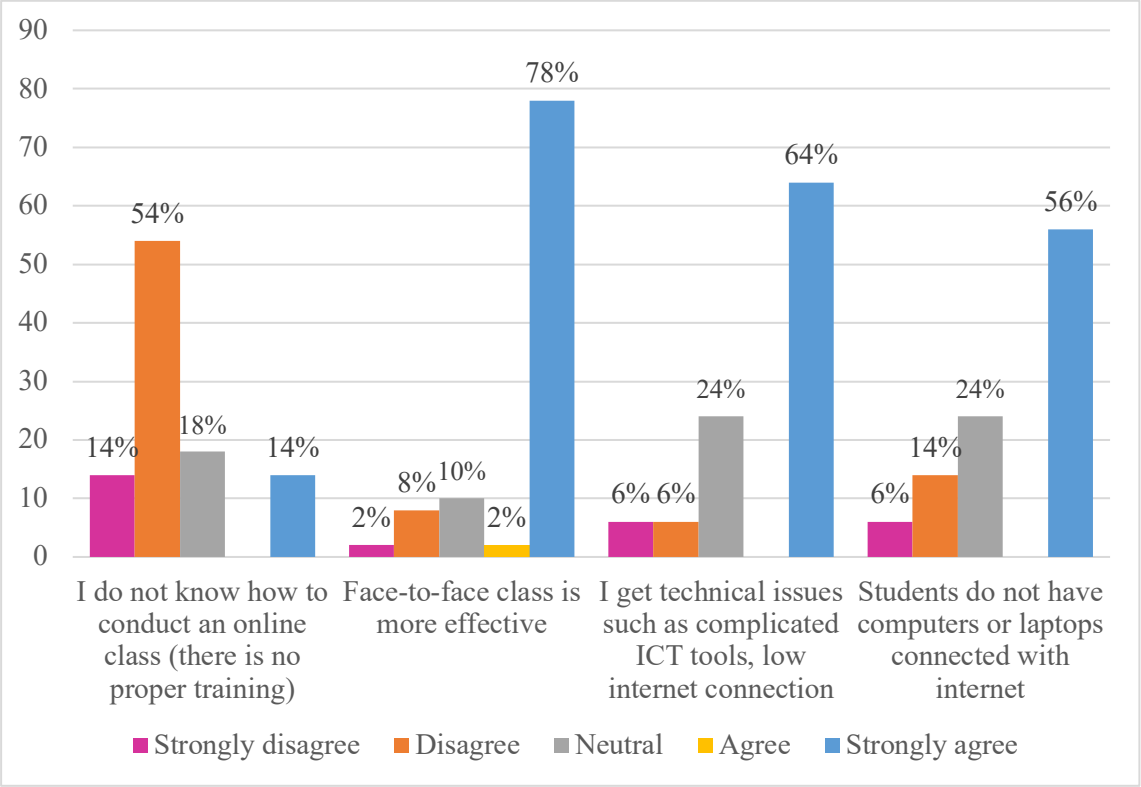

Figure 4. Teachers' perceived reasons for not conducting synchronous online classes

As revealed, the majority of teachers strongly believed that face-to-face class is more effective (80%). This result is in line with Mardiah (2020), Rahayu and Wirza (2020) when they concluded the shifting to online teaching was not effective in actual practices. In addition, 64% of teachers also strongly agreed that they had technical issues such as complicated ICT tools, low internet connection, limited time and participants for one application account. The finding supports evidence from the previous observations of Rasmitadila et al. (2020), Cardullo et al., (2021), Hoang & Le (2021), and Ha & Ngo (2021). Besides, the reason that students did not have computers or laptops connected with the Internet also accounts for 56% of agreement. However, many teachers did not agree with the statement "*I do not know how to conduct an online class (there is no proper training)*" with 68% of disagreement. A possible explanation for this result is that teachers received some types of training and guidelines for remote teaching. In the interviews, six teachers (60%) also admitted that they got at least one training on how to organize the remote teaching, either official training or sharing sessions. These findings are fairly different from those of Hoang & Le (2021) when only 49,3% of teachers in their study admitted that they got clear guidance of moving to remote teaching. Some teachers in this study argued that they did not receive any official training from the school, and they proactively learnt from the Internet or from sharing among their teaching team.

4.4. Teachers' perceived ICT competence

Figure 5 shows teachers' self-report about their capabilities to use ICT tools in teaching activities.

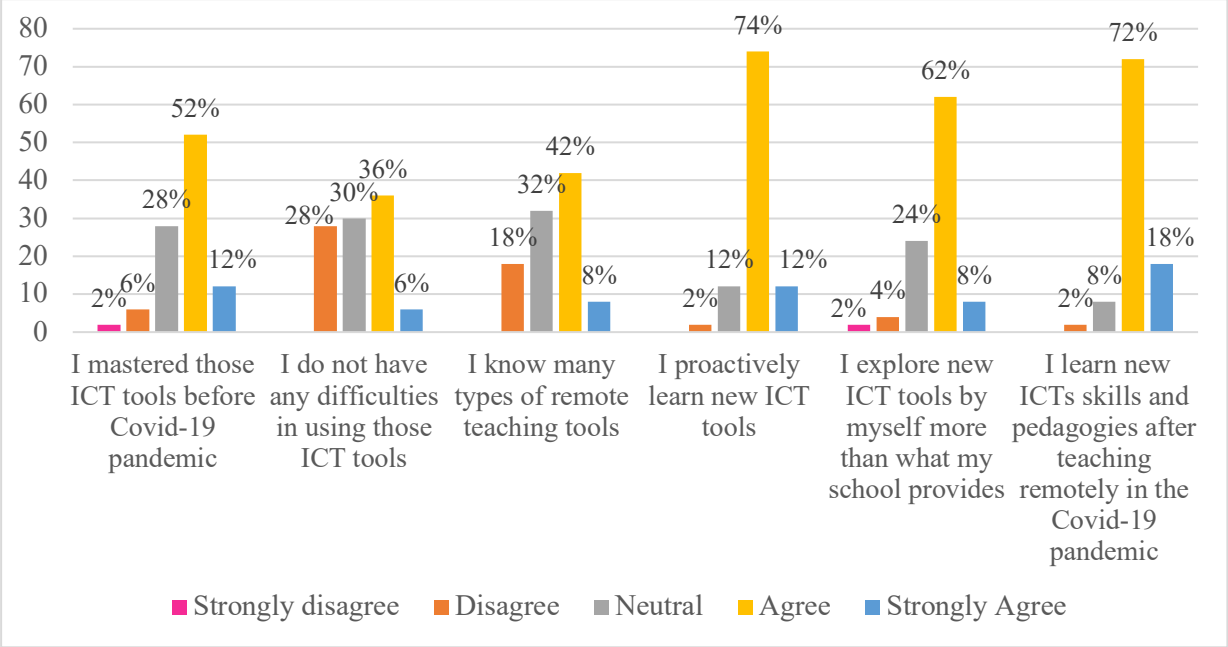

Figure 5. Teachers' perceived ICT competence

In contrast with the earlier findings of Peeraer and Petegem (2011) and Huynh and Pham (2018) when they found that Vietnamese primary English teachers were low users of ICT, it is obvious from figure 5 that teachers in the current study had high perceptions on their ICT ability. 64% agreed that they had mastered those ICT tools before Covid-19 pandemic. 50% knew many types of remote teaching tools. Their ICT implementation was no longer just using basic office applications in the computers, they used advanced applications to engage students such as Kahoot, Quizizz, Google Forms instead. This difference may be explained by the fact that the majority of participants in this study were young teachers aged 22-34 who are considered better at ICTs. Besides, 42% agreed that they did not have any difficulties in using those ICT tools while 30% had neutral opinions and 28% disagreed with the statement. Regarding learning ICT tools, most teachers admitted that they proactively learnt new ICT tools (86%), and they mainly explored new ICT tools by themselves more than what their school provided (70%). Noticeably, 90% of the teachers agreed that they learnt more new ICT skills and pedagogies after teaching remotely in the Covid-19 pandemic. This finding further supports the previous studies of Cardullo et al., (2021) and Tunmibi, Aregbesola, Adejobi, and Ibrahim (2015) who observed that technological skills of both teachers and students were improved after teaching and learning online.

4.5. Teachers' overall perceptions on remote teaching for primary school students

In the interviews with ten teachers from six different schools, teachers had different opinions about teaching English online to primary students. Supporting the evidence from the previous studies of Todd (2020), Rahayu & Wirza (2020), and Hoang & Le (2021), the majority of teachers in the interviews (70%) had positive attitudes towards this teaching approach. These teachers opined that "*remote teaching is a good way, especially in the pandemic, to ensure students' learning continuity and school's curriculum*". "*This is also a suitable method to help students review not only old knowledge but also practice self-study skills at home*" (T1). T10 added that "*teaching and learning online gives students and teachers opportunities to be exposed to ICTs and learning resources on the Internet*". According to T6 and T8, "*another advantage of remote teaching is that students can learn at any time and anywhere or re-watch the video lessons for better understanding*". This also accords with the observations of Hrastinski (2008) and Mardiah (2020) when they concluded that students' material comprehension skills were improved in asynchronous learning activities.

On the other hand, other teachers had mixed feelings about teaching online to primary children. Because it was a requirement of social distancing practice in the Covid-19 pandemic, remote teaching was a good choice to ensure students' learning continuity. In fact, remote teaching to young learners was not effective due to numerous difficulties (T6, T9 & T10). According to T8, "*primary school students are still too young to take the initiative in the study. It is hard for them to acquire knowledge through the screen because primary children are usually active and easy to lose concentration. Students of grades 3-5 are acceptable in online classes, but students of grades 1-2 get very low effectiveness. The reason is that students of grades 1-2 usually look around, not looking at the screen, not caring about what the teacher is saying, even getting out of the chair, running around*". Similarly, T8 and T9 said that learning via Zoom Meeting is suitable for grades 3-5. For grades 1-2, teachers can send links of lessons and exercises via Zalo for students to study with the assistance of their parents.

When evaluating the effectiveness of the remote teaching activities that the teachers had been operating, five teachers (T1, T3, T4, T6 & T7) reported that there were about 70-80% of student's participation in their online classes. The rest of teachers said that their online teaching practices were not as effective as they expected when the student's participation was just 50%. The other students did not participate in online learning because they did not have laptops, computers or smartphones, and their parents were too busy to support them.

4.6. Teachers' suggestions for improving remote teaching

In order to better remote teaching and learning practices, teachers were asked to rate their attitudes towards the suggestions provided in figure 6 below.

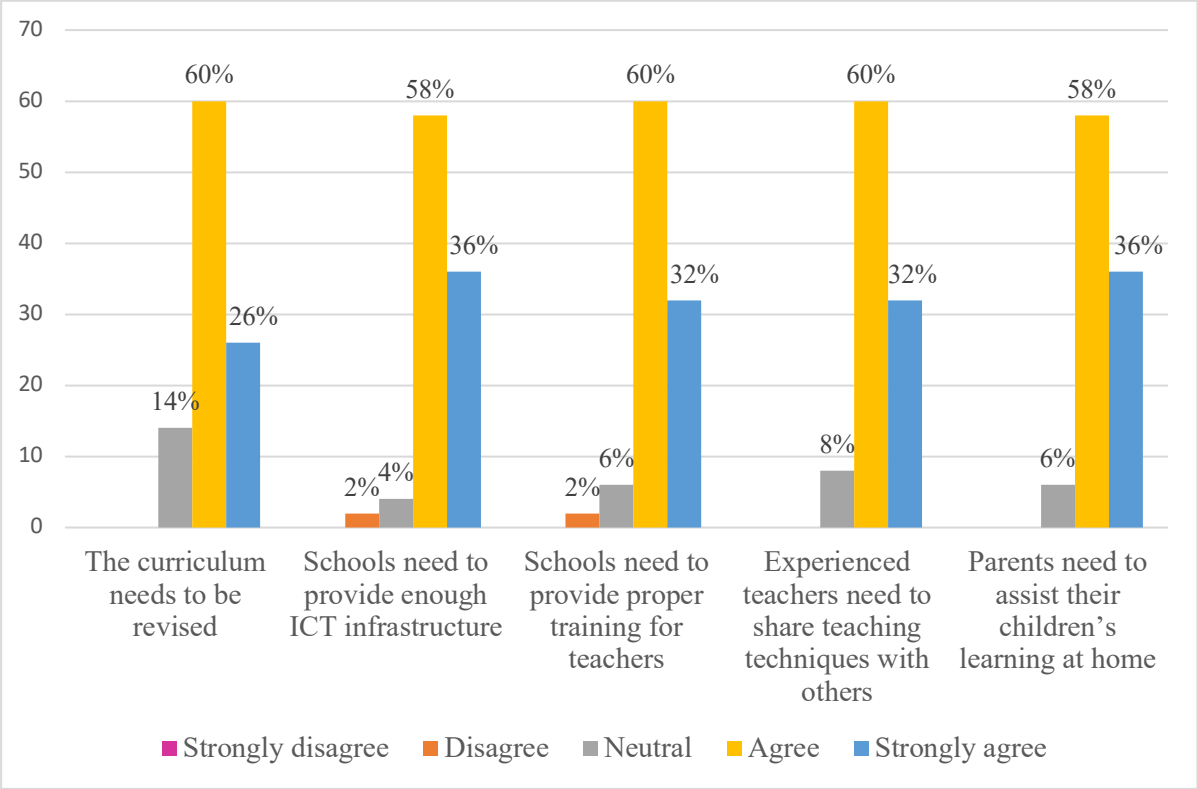

Figure 6. Teachers' suggestions to improve remote teaching

It can be seen from the results that teachers strongly agreed with all the statements with more than 90% of the agreement for each. The statement of "The curriculum needs to be revised" also got high agreement with 86%. These suggestions are in line with those of Nguyen et al. (2017), Pham, Tan and Lee (2019), and Truong and Qalati (2020) when they mentioned the roles of MOET in providing enough ICT facilities and training for teachers, and revising school curriculum in order to reduce the difficulties teachers were facing.

Similarly, from the interviews, parents' support was also highly required to make remote learning more effective. Parents can help their children by providing learning devices and assisting them with technology. Many other suggestions were also drawn such as sharing teaching materials among teachers, flexibility in time and place of organizing online classes (T1), shortening lessons or small amount of knowledge in each lesson to help students acquire and remember knowledge better (T4, T5), creating attractive lessons by inserting interactive games (T7), teachers' mastering in ICT tools to make creative lessons (T8), providing handouts for students who cannot join remote learning (T3), and combining many tools such as Zoom, Zalo and YouTube in delivering lessons to better remote teaching and to reduce limitations of only one tool (T10).

4.7. Teachers' perceived intentions to remote teaching and ICTs for young learners

Teachers' plans of using remote teaching and ICTs in teaching after the Covid-19 pandemic were rated as follows.

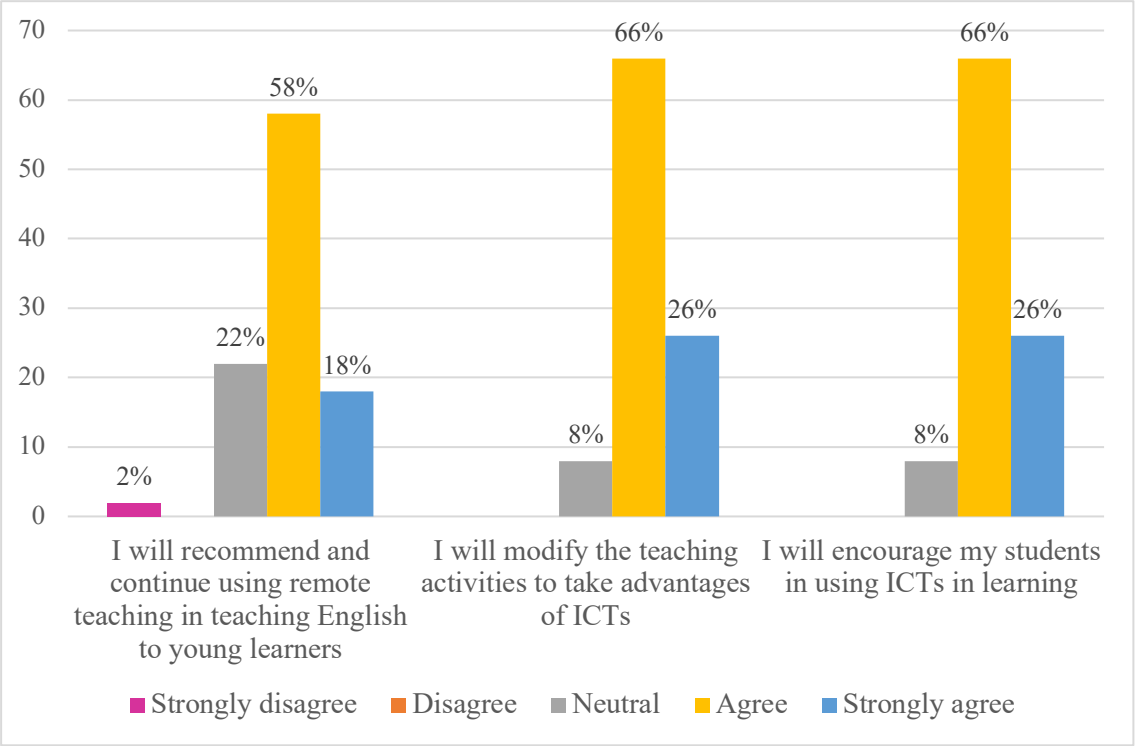

Figure 7. Teachers' intention in using remote teaching and ICTs

The results from figure 7 reveal that 76% of teachers had positive attitudes towards continuing remote teaching to young learners. 92% also agreed that they would modify the teaching activities to take advantage of ICTs, and they will encourage students to use ICTs in learning.

In the interviews, eight out of ten teachers showed their intentions to continue organizing remote teaching activities for primary school children after the Covid-19 pandemic. Two others said they would do remote teaching if their schools required them to do so (T2& T7). Most teachers agreed that a 35 minute-period in each class is too short, so it is a good idea to organize extra online classes to help students review knowledge and learn more advanced lessons. "*These lessons could be set up on weekends or before exams*" (T3 & T10). Four teachers (T4, T5, T6 &T8) confirmed that they would combine face-to-face teaching and remote teaching activities with helping students master the knowledge learned in school. Slower students could re-watch the lessons many times, and faster learners could acquire new knowledge from the extra lessons. Moreover, through short tests on Google Forms or language games, teachers can evaluate students' understanding so that they give feedback immediately. Understanding the benefits of remote teaching, all teachers agreed that they highly recommend this approach and are willing to share their knowledge and skills with other teachers.

It is encouraging to compare these findings with those of Rahayu and Wirza (2020) and Irene van der et al. (2020) when they found the high intention of teachers in implementing

technology in teaching after the pandemic. A possible explanation for this is teachers' awareness of the advantages of ICTs in teaching and learning.

5. Conclusion

5.1. Conclusion

Remote teaching is unavoidable in the context of the Covid-19 pandemic when school closures have happened massively in order to prevent the disease outbreak. This study strived to know how primary English teachers did to ensure students' learning continuity during the school lockdowns, the challenges they were facing and their views towards teaching English remotely to primary school students. The findings of the study are disclosed as follows.

Following the guidelines of the MOET and school management boards, teachers tried to choose ICT tools or platforms which were suitable for their students' circumstances to organize the remote teaching. Thanks to the free policy, Zoom Meeting, Zalo and YouTube were the most popular platforms that teachers used. Many teachers organized synchronous teaching activities via Zoom, and others made video lessons and posted on YouTube and Zalo for students' learning.

However, the sudden switch to remote teaching without any preparation or experience brought teachers plenteous obstacles. It is even more difficult when working with primary school students. One of the hardest problems was that primary school children need parents' involvement and assistance in their learning process. This also requires parents to provide their children with learning devices and support them with technology. Teachers are required to create more interactions and hands-on activities to keep students focused as well. In addition, the quick shift to remote teaching put lots of pressure on teachers when they had to perform new roles such as a video maker. Although many teachers admitted that they were good at the remote teaching tools, and they knew how to conduct an online class, remote teaching overloaded them and made them feel stressed when they tried to learn how to create an attractive video or a creative lesson. Some of them still felt unconfident in front of the camera. Furthermore, the problems that many students did not have computers, laptops and technical issues made their teaching practices ineffective. That may be the reason why they still believed face-to-face learning was more effective in comparison with remote learning.

When it comes to teachers' overall views on remote teaching to young learners, the majority of teachers expressed their positive attitudes towards this teaching paradigm. Despite the challenges, they believed that remote teaching was a good way to ensure students' learning progress and the school's curriculum, especially in the current situation of the Covid-19 pandemic. Teachers and students also had opportunities to be exposed to the abundant teaching and learning resources from the Internet. Through the asynchronous activities, students could learn at their own pace and time, so they understand the lessons better. Teachers revealed that they learnt new ICT tools and improved ICT skills after teaching remotely during the pandemic. Many intended to continue using the remote teaching approach after the pandemic as a way to give students extra lessons, even though their school does not require to do so.

In order to tackle the challenges in facilitating remote teaching, many suggestions are drawn in the study. Regarding the school's role, it's necessary to provide proper training for teachers

in using ICT tools and remote teaching pedagogies. Schools also need to upgrade ICT infrastructures and revise the curriculum to make it suitable for remote learning. Shortened lessons may help young students have time to comprehend the knowledge. Schools need to let teachers be flexible in choosing teaching materials, time, and place to organize their lessons so that they can meet their students' needs. In connection to the teacher's role, it is a must for them to master the ICT tools and platforms in order to create attractive lessons. It is suggested that teachers can combine different ICT tools, both synchronous and asynchronous approaches to make teaching activities more effective. Experienced teachers also need to share knowledge and skills with their colleagues. For the students who do not have conditions to join remote learning activities, teachers can make handouts for them, guide them to self-study, and review the lessons when they get to a face-to-face class. Additionally, parents play a crucial role in supporting their children's learning at home by giving them learning devices and assisting them with technology.

5.2. Limitations

Although this study may contribute to the current literature an insight into what happened during the school closures due to the Covid-19 pandemic and the EFL teachers' perspectives on remote teaching to primary school students, several limitations urge for further research on this topic. Firstly, the study was done with a small sample of teachers, so the results may not be generalizable to all academic settings, especially in the rural and remote areas where the conditions for remote learning are still inadequate. Secondly, the study mainly focused on teachers' views and practices without any investigations on those of other stakeholders such as students, parents, and schools. Finally, the effectiveness of remote teaching has not been thoroughly examined when the time-shifting to remote teaching was not long enough to evaluate. As a result, further studies can fulfill these limitations with investigations into perspectives of parents, students, and schools, broadening research to rural and remote areas, and evaluating the effectiveness of remote teaching activities.

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AsiaCALL Online Journal
ISSN 1936-9859; https://asiacall.info/acoj
Vol. 13, No. 1, 2022
pp. 22-39

Received: 11/10/2021
Revision: 02/11/2021
Accepted: 05/11/2021
Online: 13/11/2021

Changes in Students' Experiences and Perceptions towards E-learning at Hoa Sen University during Covid-19 Pandemic

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EOI: http://eoi.citefactor.org/10.11251/acoj.13.01.002

Abstract

The COVID-19 epidemic has had a profound influence on every area of society, particularly on education. For the duration of the epidemic, almost all institutions and universities have switched traditional learning to E-learning as a way of preserving academic continuity. As a result, students' perspectives and experiences with online learning are becoming more relevant, necessitating additional research. The survey was conducted in two phases: in March 2019 (before the covid-19 pandemic) and in July 2020 (during the pandemic). The results were used to evaluate changes in students' views and experiences of E-learning at Hoa Sen University (after the first covid-19 pandemic). A total of 158 and 214 people were recruited to participate in the first and second phases of the study, respectively. To gather and evaluate data obtained via online questionnaires, several quantitative and qualitative techniques were utilized. The research findings revealed that students had more positive attitudes about studying through online education. In view of the escalating covid-19 epidemic, educators' suggestions were offered to enhance the efficacy of online instruction.

Keywords: perceptions, experiences, EFL students, E-learning

1. Introduction

Many countries have declared the closure of all educational institutions as a result of the outbreak of the new coronavirus illness, which has spread across the world. Therefore, operations have been suspended in order to prevent students from getting infected with the virus, which is possible in such a highly socialized setting as the university. According to UNESCO (2020), 186 countries have already implemented nationwide closures by the end of April 2020, impacting about 73.8 percent of all learners. Vietnam's government announced that schools would be closed on March 27, 2020, due to the danger of a pandemic with outbreaks occurring across the nation and throughout the globe. However, to cater to learners' requirements, a non-traditional education model that is fast and efficient has been created (Vietnamese Government, 2020). Universities have moved swiftly to develop online learning

CITATION | Hoang, T. T. D., & Tran, Q. H. (2022). Changes in Students' Experiences and Perceptions towards E-learning at Hoa Sen University during Covid-19 Pandemic. *AsiaCALL Online Journal, 13*(1), 22-39. EOI: http://eoi.citefactor.org/10.11251/acoj.13.01.002.

programs that use a variety of platforms in order to ensure that students have a consistent learning experience. During the first few months of 2020, Covid has directly impacted Vietnam's fast and strong transition away from conventional schooling and toward virtual classrooms. This change, however, seems to be a natural progression, especially in light of the technological advances that students have at their disposal. Due to the obvious fast development of E-learning, teachers and students are becoming more used to new teaching and learning methods that were previously uncommon in Vietnam. Suppose virtual teaching is to be established as the new standard in teaching-learning methodology. In that case, it is critical to comprehend learners' views on the approach and to examine learners' tendencies toward it, such as their level of inclusion and suggestions, among other things. The purpose of this study is to assess learners' experiences as well as their attitudes about E-learning at Hoa Sen University during the outbreak of the pandemic.

2. Literature review

2.1 Online learning's advantages and applications

Internet-based learning, often known as electronic learning or E-learning, is a form of distance learning or online education that has long been a component of educational institutions across the globe (Bartley & Golek, 2004). It has been the most popular field of training in recent years to fulfill learners' requirements because of the covid-19 epidemic. As seen by Singh and Thurman (2019), E-learning is described as the experience of learners in either synchronous or asynchronous situations using a range of devices (e.g., mobile phones, laptops, and so on) that can connect to the Internet. In these settings, students may study and interact with their instructors and other members of their class from any location and at any time of day or night. Due to the obvious nature of the synchronous learning environment, students may participate in live lectures, engage in real-time conversations, and get instant feedback. Instead of live lectures or actual classrooms, learning material is delivered via a multitude of learning systems and forums in an asynchronous learning environment rather than through a single education model. As a result, there is no immediate way to get feedback (Littlefield, 2018).

Since most of the research compares these two formats to traditional face-to-face learning, Hoic-Bozic, Mornar, and Boticki (2009) consider hybrid learning, also known as blended learning, and completely online learning to be the most important popular types of electronic learning. On the other hand, blended learning combines conventional face-to-face classes, virtual classrooms, and collaborative learning via the use of other technology.

In addition to its efficacy in education, E-learning may be used as a career development tool. It is cost-effective compared to higher education expenses, and it can offer world-class education for anybody with an internet connection (Gratton & Stanley, 2009). Online learning may also be seen as a tool for using technology to make the teaching-learning process more student-centered, innovative, and adaptable (Singh & Thurman, 2019).

The learning outcomes of online learners are comparable to or better than those of traditional learners, and students are very satisfied with their online learning experiences (Navarro & Shoemaker, 2000). According to Rovai and Jordan (2004), who examined the relationship between students' sentiments of community in the traditional classroom and those in the blended format, students in the combined model had a stronger sense of community than those in the conventional style. After controlling for sample selection bias, researchers found that exam results for students taking the online course were four points higher than those doing it in the traditional format. In this experiment, participants were randomly allocated to either a conventional classroom setting (the control) or a hybrid online learning format that convened once a week and required students to do most of their work online (treatment). The study's findings showed that both groups learned in a comparable way, and that a hybrid course might save money while also boosting productivity over time. There will be more learning gains and cost savings if new online learning tools and software are regularly created and evaluated (Harmon & Lambrinos, 2006).

2.2 Issues arising in the context of online teaching and learning

Despite the fact that there are a number of tools available for online academic success, they may sometimes create significant difficulties. For example, failures to download files, installation difficulties, login problems, audio/visual problems, and so on are all instances of hurdles and impediments associated with modern technology. Students may find online teaching to be boring and uninspiring at certain points during the course. Students seldom find the opportunity to engage in online learning since it requires a great deal of time and flexibility. Ha and Ngo (2021) showed that the stability of the internet connection has a significant impact on the students' listening processes. In addition, online learning suffers from a substantial lack of individual attention. It may be difficult to offer two-way communication to students since they expect it.

The learning process might not reach its full potential unless and until students put what they have learnt into practice. Online material may sometimes be purely theoretical, making it difficult for learners to put their knowledge into practice and absorb it effectively. Course material that is not even up to par with industry standards is also a major source of worry. A lack of a sense of community, technical difficulties, and difficulty understanding educational objectives are among the major obstacles students face while studying online (Song et al., 2004). In addition, they were found to be unprepared to combine their work, family, and social lives with their study lives in an online learning environment. Furthermore, students are often underprepared for a wide range of E-learning and academic-type abilities in general. When it comes to utilizing Learning Management Systems, students have a low level of preparedness for doing so (Parkes et al., 2014).

2.3 Studies on experiences and perceptions on E-learning before the pandemic

For Warner et al. (1998), three factors determine students' readiness for online learning: (1) their interest in learning rather than direct instructional activities; (2) their confidence in using

telecommunications for learning, including competence and confidence in the Internet and digitally used contact; (3) their ability to interact in learning independently. Instructors' interactions with them significantly influence students' views of online learning.

Critical thinking and information processing are facilitated by a stable course design and the opportunity to engage with teachers. As per the greater part of research participants, one of the most helpful elements of online learning experiences was course design (Song et al.,2004)

Students' views of course quality are influenced by the quality of the instructional framework while taking courses over the Internet (Yang & Durrington, 2010). According to Huss and Eastep (2013), 59 percent of students said tutorials helped them comprehend the technology or topic matter covered in their classes. A few drawbacks of online education were also raised throughout the debate. The absence of a feeling of community and/or emotional isolation, difficulty interacting with other learners, technical problems, and the need of a long-term commitment to learning are all barriers to online learning, according to Hara and Kling (1999), Petrides (2002) and Vonderwell (2003). Online courses, when well-structured, may be equally as effective as those taught in a traditional classroom (Nguyen, 2015).

2.4 Research on E-learning experiences and perceptions during the epidemic

In response to the rapid development of COVID-19, education has been pushed toward a more technological and commercial emphasis. Strategies for mitigating the impact of the change on the normal learning process should be implemented in conjunction with it (Gurukkal, 2020). With the transition to online learning in higher education, views of higher education need to be reassessed, particularly ideas about institutions and what students should expect from them. It is possible to teach theoretical courses, for example, online. On the other hand, practical courses should be taught face-to-face to guarantee the best possible teaching methods in terms of monitoring and mentoring of students throughout the course. Therefore, technological advancements may enable larger classes to be more flexible and customized to the needs of individual students (Siripongdee et al., 2020).

Hebebci et al. (2020) conducted research in Turkey to determine what instructors and students felt about the distance education applications of the disease. It was discovered in the research that distance learners struggle to complete group tasks because of a lack of on-campus socialization, as indicated by 42.9 percent of those who took part in the study.

A thorough discussion of the advantages and disadvantages of distance learning was conducted by Sadeghi (2019), who argued that it provides the advantages of being able to study from anywhere at any time, saving a significant amount of money, eliminating travel, allowing students to choose their own path of study, and saving time. On the downside, there are a number of issues to consider, including a significant risk for distraction due to sophisticated technology, a loss of social connections, and the difficulty of staying in contact with instructors. Whether during or after a crisis, online learning is important to the learning process. Furthermore, in order for schools and colleges to be successful, the technological infrastructure must be properly maintained in some way (Nikdel & Fardin, 2020). Dhawan (2020) analyzed the benefits, drawbacks, opportunities, and risks that online learning offers. The author showed

how the global financial crisis highlights the importance of digital competence in dealing with the crisis and facilitating learning opportunities for students. Consequently, schools should educate students on how to utilize computers. Another research conducted in Malaysia looked at the satisfaction of male and female students who used E-learning portals to complete their studies. There is a significant correlation between user satisfaction and E-learning as a natural consequence. Affecting both participants' satisfaction levels is the quality of the e-service and the amount of information provided (Shahzad et al., 2020). Some of the advantages of online learning are flexibility, ease of access, and a connection between students and instructors. In light of the significance and advantages of online learning, it has been brought to the notice of the public that it is plagued by issues such as data privacy. Due to the fact that students access online portals via computers and mobile phones, their personal information is at risk. It is essential that university staff and students be trained on cybersecurity and data privacy issues (Luxatia, 2020). In addition, Ngo (2021) stated that instructors play a crucial role in the online learning environment. It is conceivable that students' interest in learning will increase if instructors become more adept at using the benefits of the Internet to produce more engaging online classes for their students.

According to what can be observed in the preceding research, students' perceptions of E-learning as well as their experiences or difficulties throughout the course of studying E-learning throughout the pandemic were extensively investigated. On the other hand, these studies often poll learners' views at a certain moment in time; only a small number of research have gone through two or more stages to examine how learners change as they get more acquainted with the learning process. In addition, studies were carried out in the context of various countries' cultures. A two-phase study to investigate the views and experiences of Hoa Sen University students in the context of the current pandemic outbreak is thus necessary.

2.5 Research Questions

Based on the assessment of the literature and the gap in the research, the survey was designed to answer the following research question in order to meet the study's objectives:

What are the changes in students' experiences and perceptions of E-learning at Hoa Sen University during the Covid-19 Pandemic?

3. Methods

3.1 Pedagogical Setting & Participants

The data was collected from two separate phases in which the first one was in March 2019 and the second one was implemented in May 2020. In the first phase, the student's understanding of E-learning was still very limited, but in the second phase the students had chances of experiencing E-learning during the pandemic time. In the study, a comparative analysis of the result from the two phases of the study is conducted to examine the effect of covid-19 on the students' awareness and experience in E-learning.

In the first phase, 230 students were targeted for the study but only 158 students from Hoa Sen University in Ho Chi Minh City participated in the study. Most of the participants were non-English major from different levels with different majors. Among 158 participants, 65.5% of the students are female, and 34.5% are male. English File, written by Christina Latham Koenig and Clive Oxenden, is the textbook for the classes, accompanied by a workbook, CDs and iTools CD-ROM. For a whole course, the students have 105 periods, and in a week, the students have 4 sessions of three periods studying in classes with Vietnamese teachers and 2 sessions with foreign teachers

It was estimated that 214 students from the Hoa Sen University in Ho Chi Minh City would take part in the research during its second phase. All the participants were not English majors, and they came from a variety of various degree backgrounds and experiences. Males outnumbered females, 50.9 percent and 49.1 percent, respectively, among the 214 participants in the study. The materials and the studying periods are the same as in the first phase. For the duration of the epidemic, Hoa Sen University students were required to study online by accessing the Mlearning page on the university's website, where they could get course materials as well as complete homework assignments and quizzes. Using the Mlearning page's statistical data, instructors assign homework, grade assignments, and evaluate students' progress in class. In order to provide lectures and engage with students directly online, instructors utilize Big Blue Button or Google Meet to deliver lectures and connect with students.

3.2 Design of the Study

The survey study was utilized as the major research design to uncover students' opinions on E-learning. According to Check and Schutt (2011) and Creswell (2014), in a survey study, the participants' views and opinions are investigated through their replies to a set of questions. They also believe that this is the most common use of survey research. As a result, a survey study was the most appropriate design for this research.

In this study, the applied research method is used to figure out the students' perceptions on E-learning and the problems that the students are facing when studying E-learning by employing accepted theories and principles. The research is of practical use to the current situation when many schools are still in the state of teaching and learning online during the pandemic. Applied research is used to deal with a specific case in Hoa Sen University without the objective of generalizing. In addition, the study is carried out with a mixed research method that involves the method of quantitative and qualitative or paradigm characteristics. The data of the study is a mixture of words, images, and variables. The qualitative data in part 1 and part 2 is non-descriptive, but it can be presented in tables and graphs because it is numerical, and the evidence can be evaluated. The qualitative data in part 3 is non-numerical and cannot be graphed, but it can be descriptive, exploratory to help investigate the reasons why the participants chose the options in part 2 with quantitative data, and it also helps to get a clear understanding of the feeling, the explanations, and the suggestions from participants.

3.3 Data collection & analysis

The questionnaire was the primary tool used in this investigation. Questionnaires are widely used to examine attitudes, views, and other factors, according to Creswell (2014) and Ponto (2015). Furthermore, this instrument is useful since it may help the researcher gather a large amount of data in a short amount of time and in both online and offline formats.

Before collecting data for the project, a pilot study of the questionnaires was conducted with selected Hoa Sen University students to validate the measurement and make any required modifications. Following that, the participants were given a google form with surveys to fill out as part of the data gathering procedure. The objective of the study and some of the more challenging E-learning words in the survey was explained to the participants at the beginning of the google form. The surveys were written in Vietnamese using basic structure sentences and were organized into topics for a better comprehension of the non-major English participants.

The questionnaire was intended to gather information on the participants' views of E-learning as well as their experience with E-learning at their university both before and after they began studying online. The questionnaire consisted of 28 questions divided into three sections. Part one included three questions intended to gather information about the students' backgrounds, and part two contained two items designed to assess the students' perceptions of E-learning. During this section, there were a total of 10 multiple choice questions with four choices for each answer choice. The third section contains 12 questions, each of which has a Likert scale with values ranging from 1 to 5 (Strongly disagree, Disagree, No Opinion, Agree, Strongly Agree). This allows students to specify their level of satisfaction with their E-learning at their universities, as well as their level of agreement with each item. In order to get more information on students' experiences with E-learning and their ideas, the three last questions were intended to be open-ended in order to obtain more specifics about their experiences.

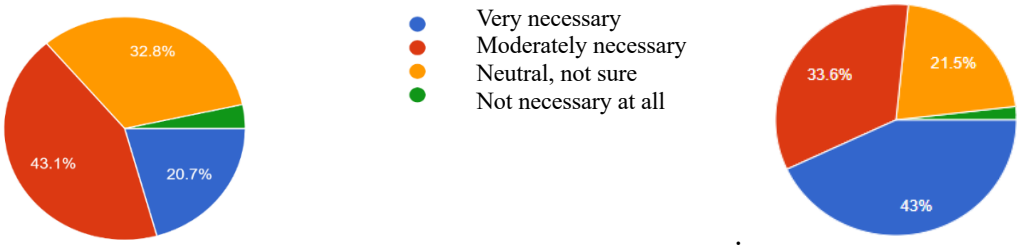
4. Results/Findings and discussion

4.1 Results in students' perceptions of E-learning

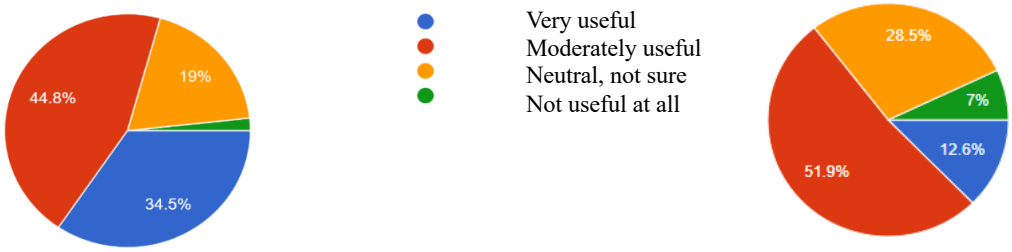
Figure 1.
Students' perceptions on E-learning

The first phase **The second phase**

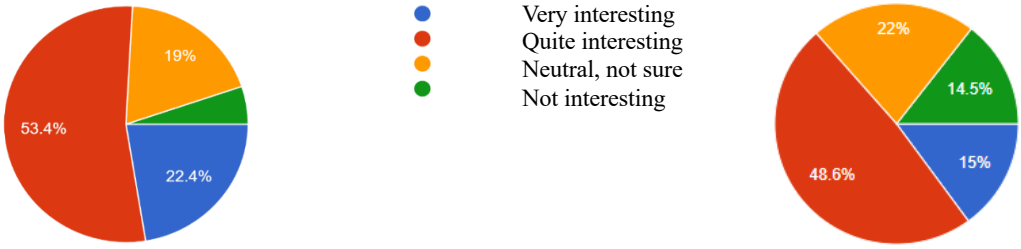
1. How necessary is E-learning to you personally?



2. How effective is E-learning to you personally?

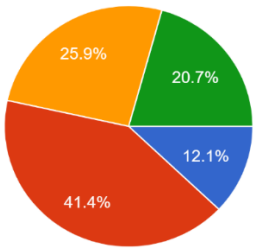


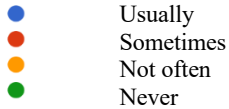
3. How interesting are online courses?

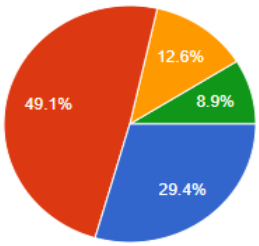


4. How often are you online for self-study?

5. How often do you make your own E-learning plan?



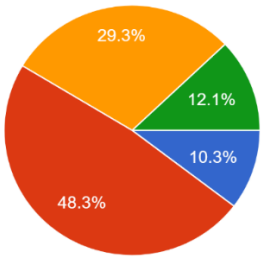


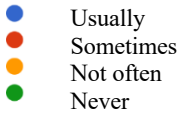


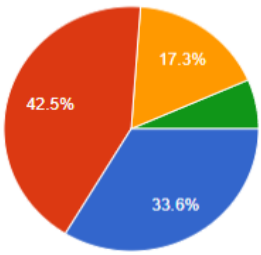
The first phase

The second phase

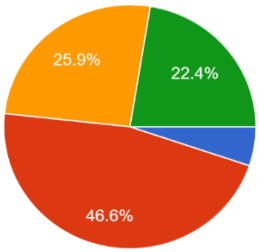
6. How often do you get motivated to study online?

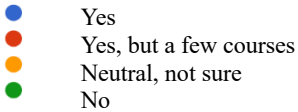


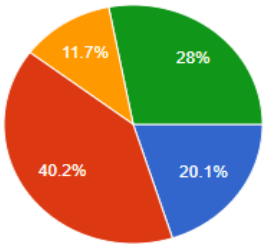




7. Should we change all courses at university into online courses?

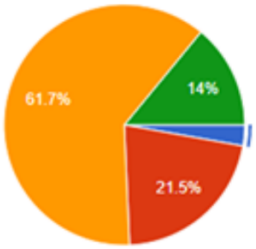


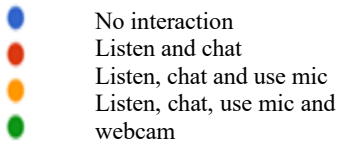




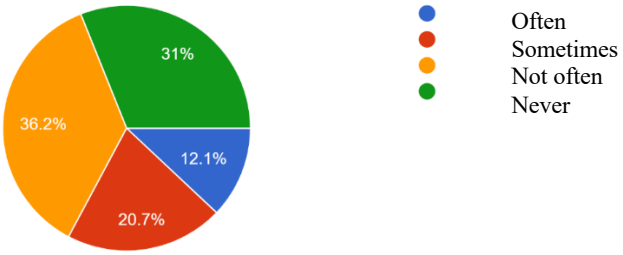
The second phase

8. What learning style do you like when you study online?

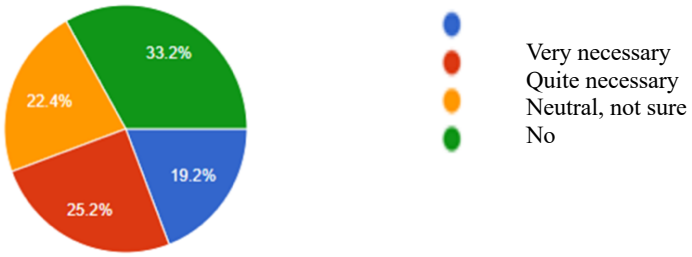




9. How often do you feel stressed when you study online at your university?



10. Is it necessary to have any training from the university for E-learning skills?



As can be seen from figure 1, the statistics on students' views of E-learning after being affected by the epidemic showed that the majority of students acknowledged the importance of E-learning. More precisely, 76.6 percent agreed that online learning is inessential, while just 1.9 percent disagreed. In comparison to before the epidemic, 63.8 percent agreed, and 3.4 percent disagreed. According to the statistics, there was a rise in views of the importance of E-learning after the pandemic's impact.

However, the results are diametrically opposed in terms of perceived efficacy and interest in E-learning. 64.5 percent and 63.6 percent agreed on the effectiveness and interest of E-learning, respectively, while just 7 percent and 14.5 percent disagreed. According to the previous statistics, the efficacy and interest in E-learning were greater, with 79.3 percent and 75.8 percent agreeing, respectively, while just 1.7 percent and 5.2 percent disagreeing. Although many students agreed that E-learning was necessary, many of them also agreed that it was ineffective. It may be because they are unfamiliar with online learning, are experiencing technical or academic difficulties, or are easily distracted by their surroundings. Consequently, they have an impact on the quality of online teaching and learning, as well as the effectiveness of E-learning. Furthermore, as compared to prior statistics, fewer participants felt engaged while studying online. We can predict from the situation that they did not have the chance to study their favorite subjects, or they felt pressured with the grades to pass the courses, or they did not have real interactions in person due to physical distance limitations, or the online teaching methods of the teachers could not pique their interest in E-learning. As a result, we should attempt to find out why we should assist and encourage students in the first place.

Due to their favorable attitudes about the importance of E-learning, a significant percentage of students said that they usually or sometimes had self-study, a study plan, or motivation in E-learning. 74.7 percent, 78.5 percent, and 76.1 percent indicated they frequently or sometimes did it, whereas just 7.5 percent, 8.9 percent, and 6.6 percent stated they never did it. There was

a significant difference in the results when compared to the previous data, with just 43.1 percent, 53.5 percent, and 58.6 percent disclosing their repeated behaviors in having self-study, study plan, and motivation, whereas 20.7 percent, 20.7 percent, and 12.1 percent stated they never did it. According to the data, most students have positive views about their studies and a high degree of autonomy in their university's online learning. It is evident that students take online learning at their institutions more seriously than other online courses.

In terms of learning methods, 83.2 percent preferred to study online by listening to instructors, chatting in the public box, and using their microphones to respond or ask questions. Only 14 percent consented to turn on the camera during class. According to the data, not many students, namely 2.8 percent, preferred to learn online without contact. Most students preferred to engage with their instructors and classmates by entering comments in the public chat box or speaking into the microphones. However, not many individuals felt comfortable interacting with others through webcams. It might be because the students want more autonomy in their studies, are introverts or had a high degree of self-taught and self-study ability. Therefore, when designing online courses, we should keep this in mind.

While asked about E-learning stress, 56.1 percent said they frequently or sometimes felt anxious when taking university online courses. 22.9 percent said they did not often feel worried, and 21 percent said they never felt frightened or stressed. According to the statistics, many students are anxious while studying online via the university platform. Perhaps, it is because they have a lot of homework, do not even comprehend the courses, or have internet connection issues, among other things. As a result, in order to discover effective solutions to the issue, we should first determine what is generating the learners' stress.

Concerning university assistance for online learning abilities, 44.4 percent acknowledged that they required aid from the university to study better with E-learning, 33.2 percent disagreed, and 22.4 percent were indifferent. Although Hoa Sen University offered technological training for E-learning, students still needed more. As a result, the institution should consider offering students certain academic training and a guidebook in online learning abilities.

Furthermore, the findings revealed the students' preference for E-learning in the future. More precisely, just 20.1 percent agreed to mix conventional learning with E-learning for all courses after the pandemic, and 40.2 percent agreed to combine but only with certain courses, while 28 percent disagreed, and 11.7 percent were indifferent. As a result, we should evaluate whether we want completely online courses or blended courses, as well as how much of each is made up of online courses and face-to-face courses, and which topics may be created in blended courses, and which can only be produced in conventional learning courses.

4.2 Results in students' experiences on E-learning at their universities

Table 1. Students' experiences and suggestions on E-learning

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1. Your university provides enough online courses	3.7%	1.4%	14%	30.4%	50.5%
2. You usually spend time on E-learning of HSU	4.2%	6.5%	20.1%	30.4%	38.8%
3. You are satisfied with online teaching method of HSU	3.7%	9.3%	28.5%	36.4%	22%
4.You are satisfied with the quality of E-learning programs of HSU	3.7%	9.3%	30.4%	38.8%	17.8%
5. You have many opportunities to interact with teachers when studying online	9.8%	12.1%	27.1%	29.4%	21.5%
6. You have many opportunities to interact with your classmates when studying online.	20.6%	20.6%	28.5%	16.8%	13.6%
7. You have difficulties with technical problems when studying online at HSU.	17.8%	16.8%	28.5%	22%	15%
8. You have difficulties with E-learning skills when studying online at HSU	11.7%	18.2%	37.9%	18.2%	14%
9. HSU provides good internet access to online courses	6.1%	12.6%	42.5%	26.6%	12.1%
10. E-learning helps you improve your study	10.7%	15%	39.3%	22.9%	12.1%
11. You are satisfied with the assessment from online courses.	5.1%	9.3%	36%	29.4%	20.1%
12. You are satisfied with EIC online courses	8.9%	5.6%	33.2%	31.3%	21%

According to table 1, the study's data analysis solely revealed the students' experiences with E-learning at Hoa Sen University after they had encountered E-learning during the Covid

epidemic. 80.9 percent of students stated Hoa Sen University provided a comprehensive variety of online courses. During the epidemic, all courses had to be taught online, as previously stated. Online learning has improved; thus, students are spending more time on E-learning, with 69.2 percent reporting that they frequently study online.

When queried about the quality of online courses and online teaching techniques, almost 60 percent said they were satisfied with the online teaching quality and instructors' teaching methods. Specifically, 56.6 percent agreed with the quality of online programs and 58.4 percent agreed with the online teaching techniques. This indicates that the school's and teachers' efforts have been recognized.

Regarding classroom contact, 50.9 percent believed they had numerous chances to engage with instructors, but only 30.4 percent said they could communicate with classmates. This is reasonable given the limitations of interaction in online learning. Even though the Big Blue button system includes a breakout room, which is strong support for gathering, the diversity of activities is still restricted.

Despite the university, IT department, and instructors' attempts to assist students, just 37% reported technical problems while studying online. The issues that students encounter may be quite objective, such as their internet connection, learning equipment, and so on, which are beyond our control.

In addition, 32.2 percent reported having difficulties with E-learning abilities when studying online at HSU. Although the institution supplied students with training and a guidebook prior to studying E-learning, it is still insufficient. It may be said that E-learning was not a difficulty for many pupils. As a result, the institution should focus more on student training to assist them in becoming more acquainted with technology and E-learning abilities.

One of the most serious issues in E-learning is the availability of high-quality internet connections. HSU offered excellent internet connections for online courses, according to 38.7 percent of students. 42.5 percent were neutral, with just 18.7 percent disagreeing. It is well acknowledged that during the first epidemic caused by Covid 19, the majority of schools and organizations in Vietnam were very perplexed during the operating period of remote working. Despite HSU's early planning for E-learning before the pandemic, there were still inevitable issues. However, the server infrastructure has been significantly improved, allowing students to experience E-learning better at HSU.

In terms of study progress, 35% stated their online learning improved, 39.3% were indifferent, and 25.7% disagreed. This may be seen as a good outcome since the implementation of synchronized online teaching occurs in a short period of time, while learning is a lengthy process. Furthermore, E-learning issues are being addressed daily. Hopefully, as internet availability and instructional tools increase, kids' academic progress will be viewed positively by them.

Students were also polled on how satisfied they were with the assessment and evaluation of online courses. 49.5 percent agreed, 36% were indifferent, and 13.3 percent disapproved. Although not many students complained about the assessment of online courses, improvements

in assessment should be explored to please students better.

There was also a question to gauge students' happiness with the EIC online program, which is a general English curriculum for non-English majors at Hoa Sen University. More than 52% of students were pleased, 33.2 percent were indifferent, and 14.5 percent disapproved, which was a tremendous encouragement to all instructors at Hoa Sen University's ELT department throughout the period of online teaching.

While being asked about the difficulties students often encounter when engaging in E-learning at their institution, almost every participant in the study said that it is very difficult to participate since they cannot communicate with instructors or classmates for clear comprehension. Certain of them highlighted facilities that directly impact the E-learning process, such as Wi-Fi connection, some deactivated features on their PCs or laptops, E-learning system problems, and so on. Aside from facility difficulties, most study participants felt that having minimal contact with instructors or classmates hindered them from gaining a clear understanding. Furthermore, the participants said that it was difficult to develop working group abilities and gain enthusiasm with E-learning, and it was simple to get sidetracked by the surroundings.

The data from the inquiry regarding their discontent with their university's E-learning revealed that technical problems such as internet connection, login error, microphone or camera error, and inefficient group activities were the major thoughts raised by the respondents.

With the gathered data on E-learning recommendations, students offered many contributions such as adding support capabilities to mobile phones, updating the server for a better connection, and using mixed learning instead of completely online. Furthermore, students want to have greater contact with lecturers as well as more opportunities to work with helpful instructional materials given by instructors. The students also suggested having subtitles for lectures, video recordings after class, and E-learning skills training. They also recommended that the institution avoid online courses with practical topics, as well as decrease the emphasis on grades and the amount of time spent studying online.

4.3 Discussion

This study's main goal was to look at how students felt about E-learning in general. Most respondents chose online courses to stay up with the curriculum because of the COVID-19 epidemic's closure, while just 1.9% thought E-learning was essential and inefficient. To go further into this subject, it was necessary to survey respondents about their experiences with online courses. Students' views on the usefulness of E-learning shifted following the epidemic, according to our research. Foresights into the future of Elearning may be found in early research such as those done by Gratton and Stanley (2009); Singh and Thurman (2019). Participants' rankings of important factors matched earlier findings. Nearly all online learning students had positive views about their education and a high level of self-reliance. Navarro and Shoemaker (2000), as well as Singh and Thurman (2019), also corroborated this result. Most students agreed that student-teacher contact was important. In support of this statement, Thompson (2014) published a study in 2014. Online programs' success is heavily influenced by students' and teachers' abilities to use computers and the Internet. It was in accordance with the findings

of Song et al. (2004), who found that convenience and flexibility were the main advantages of online courses. Respondents said working in collaborative groups was more convenient than having everyone's schedules changed as in a traditional classroom setting, according to Petrides (2002). As per Poole (2000), students often used their personal computers to obtain course materials since it was the most convenient option for them. Online courses should be tailored to meet the needs of the individual student as a result. One of the most important factors in the success of online courses has been interactivity. Students' social presence correlated significantly with their overall happiness with the medium, according to Shahzad et al. (2020). It is critical to keep online class participants interested by including them in a variety of timely and relevant activities. Petrides (2002), Vonderwell (2003), and Hara and Kling (1999) explored the significance of contact frequency in creating online classrooms (2003). Participants were also asked for suggestions on how to make online learning more successful. To compete with conventional classrooms on a level with content, connection, recorded videos, and adequate follow-up, online learning environments were compared to those in use. The debate was repeatedly rehashed by the majority of those there. Online training thus allows institutions and/or teachers electronic contact, improving comfort and extending educational opportunities for students (Warner et al., 1998; Hofmann, 2002). Colleges may soon switch to a hybrid delivery model in which courses are taught both on- and off-campus, in small groups with social distance. In designing and arranging online courses, the findings of this research may be very helpful. As a result of time constraints, the study was limited to students in the ELT department. Furthermore, in order to keep things short and efficient, we focused only on the views of students and omitted teachers from the research.

5. Conclusion

In response to attempts to restrict the spread of the new coronavirus, the educational system's contours are changing, with online education becoming the primary method of teaching. Universities and institutions are resorting to online platforms to stay up with the curriculum. It might be too early to anticipate how students and teachers will cope with online learning when they find its limitations and reorient to deal with them, but teachers' and students' views and readiness are important variables to consider, which we've tried to record. According to the results of this study, the majority of students had a positive attitude about online education in the aftermath of Corona. Online learning was found to be beneficial since it provided learners with flexibility and convenience. Students preferred material that was well-structured from university Mlearning courses. They also emphasized the need for interactive sessions of each course, complete with quizzes and tasks, in order to optimize the learning experience. However, because of technological limitations, delayed response, and the instructor's inability to properly manage IT skills, most students perceived online courses to be more uninteresting than conventional classrooms. To make an online course more effective and productive for learners, all of these factors should be considered while designing it. Once the COVID-19 pandemic has passed, it is probable that educational systems will continue to use online platforms as study

aids, although in a hybrid manner alongside traditional courses. As a consequence, the findings of this study will be useful in rethinking and reconstructing higher education with online components.

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AsiaCALL Online Journal
ISSN 1936-9859; https://asiacall.info/acoj
Vol. 13, No. 1, 2022
pp. 40-72

Received: 29/09/2021
Revision: 01/11/2021
Accepted: 16/11/2021
Online: 17/11/2021

Vietnamese Students' Perspectives on Online Micro-Teaching (OMT) as a Technique in English Teacher Education in the 4.0 Era

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EOI: http://eoi.citefactor.org/10.11251/acoj.13.01.003

Abstract

Since its emergence in 1963, micro-teaching has been widely adopted as an effective technique in teacher training and development across various disciplines, especially in English language teaching. A huge body of research focuses on its effectiveness and students' and teachers' perceptions of this practice. However, scant literature can be found on online micro-teaching (OMT), particularly in Vietnam. Therefore, this survey research is aimed to explore Vietnamese students' perspectives on OMT, centering on (1) what and how they learned, (2) what difficulties they faced, and (3) what suggestions they made on future OMT. To address those questions, both qualitative and quantitative methods were employed to collect data. Specifically, a questionnaire via Google Forms, consisting of 17 closed- and open-ended questions, was delivered to 142 students at the Faculty of English Linguistics and Literature, the USSH, VNUHCM. The study results show that the participants could learn teaching and digital competencies from OMT through six main ways. Additionally, they faced three main difficulties, namely (1) checking students' learning progress/attention/concentration, (2) promoting students' participation, engagement, and collaboration, and (3) technology (Internet connection and teaching equipment). However, to better improve future OMT sessions, the participants provided five key suggestions, including (1) backup plans, (2) preparation, (3) training and rehearsal with tools and OMT, (4) engagement methods, and (5) classroom management and professionalism. They also recommended some online tools for OMT.

Keywords: micro-teaching, online micro-teaching, teacher education

1. Introduction

Since its emergence in Stanford University's Teacher Education Program in 1963, micro-teaching has been conceived as an effective teacher-training technique and has been implemented around the globe. Micro-teaching, with its typical characteristics of (1) reduced length, (2) narrowed scope, and (3) fewer students than usual, has been considered as a "safe" setting in which students may learn how to teach (Allen & Ryan, 1969, cited in Park, 2021). Therefore, micro-teaching has been implemented in a myriad of forms in various disciplines, especially in English Teacher Education programs.

CITATION | Pham, N. K. T. (2022). Vietnamese Students' Perspectives on Online Micro-Teaching (OMT) as a Technique in English Teacher Education in the 4.0 Era. *AsiaCALL Online Journal, 13*(1), 40-72. EOI: http://eoi.citefactor.org/10.11251/acoj.13.01.003

In Ho Chi Minh City, Vietnam, several institutions offer English Teacher Education programs, most of which embed micro-teaching as part of the training process for preservice teachers or student teachers. One such institution is the Faculty of English Linguistics and Literature (EF), University of Social Sciences and Humanities (USSH), Vietnam National University, Ho Chi Minh City (VNUHCM). At the EF, it is compulsory for all students to take the Teaching Methodology course, which provides them with the fundamentals of English Language Teaching, followed by a micro-teaching episode as one final assessment task. In addition, students majoring in English Language Teaching are required to take further teaching-related courses, namely Teaching Practice 1 and 2. While the Teaching Methodology course is theory-oriented, Teaching Practice 1 and 2 courses are practice-oriented, and micro-teaching is also an integral part of the two courses. Besides the full-time undergraduate program, the EF offers a TESOL Certificate Program intended for those who do not major in English Language Teaching or TESOL but wish to teach English at foreign language centers. The program enrollees receive a TESOL certificate when they finish all the required courses, one of which is Teaching Practice 3. The course gives the students opportunities for more intensive English teaching practice with the micro-teaching technique.

Last May 2021, when the students of Teaching Methodology, Teaching Practice 1, 2, and 3, taught by the researcher, were preparing their lesson plans for the coming micro-teaching episodes, the Covid-19 pandemic started raging in Vietnam for the fourth time. Consequently, the remaining theory-oriented sessions switched from face-to-face to online teaching and learning, and all students of those courses conducted their micro-teaching sessions online for the first time. However, this new type of practice, online micro-teaching (OMT), particularly in the Vietnamese teaching context, is needed given technological advancements in the Fourth Industrial Revolution, also known as the 4.0 era of the digital revolution. Azrai, Rini, and Suryanda (2020) concluded in their study that micro-teaching was still essential in teacher education in the Fourth Industrial Revolution. Also, teacher education programs are now challenged with the goal of developing the next generation of teachers who are proficient in integrating technology into their daily practice (Diana, 2013). To that end, OMT needs to be studied to provide student teachers teaching practice opportunities but also help familiarize themselves with teaching online.

Given the potential value of OMT, the current study is aimed to explore the students' perspectives on their OMT experiences. The study results are expected to give the researcher, the teacher in charge of the teaching-related courses mentioned earlier, a better understanding of OMT to improve it in the future. Further, the study is hoped (1) to make a theoretical contribution to the research body on micro-teaching in general, on OMT in particular, (2) to benefit other teachers, managers, or developers in the design of OMT as part of their English teacher education programs, and (3) to lay the groundwork for future research on OMT.

2. Literature review

This section displays related theories on micro-teaching and explores how micro-teaching can be conducted online in relevant studies.

2.1 Micro-teaching

In this part, micro-teaching is reviewed in terms of its definitions, rationale, procedure and cycle, applications, benefits and limitations, and some other related aspects.

2.1.1 Definitions of micro-teaching

Several definitions of micro-teaching can be found throughout the literature. For example, Cooper and Allen (1971) defined micro-teaching as “a teaching situation which is scaled down in terms of time [4-20 minutes per teaching episode] and numbers of students [3-10 students]” (p. 8). Another definition which also focuses on the "scaled-down" nature of micro-teaching was given by McAleese and Unwin (1971), who considered micro-teaching as a "scaled-down teaching encounter, scaled-down in terms of class size, lesson length and teaching complexity" (cited in Trott, 1976, p. 2). In addition, micro-teaching was later defined as "a laboratory training procedure aimed at simplifying the complexities of regular teaching-learning processes" (Perlberg, 1987, cited in Grossman, 2009).

Despite the variations in the way micro-teaching was defined, micro-teaching frequently involves a micro-teaching episode, including a lesson and immediate feedback on a student teacher's effectiveness. The sources of feedback can be diverse, from videotape or audio-tape recordings, supervisors, students to the student teacher's self-perception. Some other aspects of micro-teacher encompass lesson length, number of re-teaches, the amount and kind of supervision, the use of video or audiotape recordings, and the number and type of students (Cooper & Allen, 1971).

Further, Allen and Eve (1968, p. 181) put forward five essential conditions for creating a micro-teaching setting as follows:

1) *Actual teaching takes place.*
2) *The complexity of the normal teaching situation, including the student numbers, the lesson scope, and the class time, is deliberately reduced.*
3) *The focus of teacher training is reduced to accomplishing a specific task, such as the practice of instructional skills or techniques of teaching, the mastery of specific curriculum materials, or the demonstration of a particular teaching methodology.*
4) *A high degree of control over elements such as time, the use of students, and the methods of feedback and supervision are structured into the training situation.*
5) *The typical feedback dimension in teaching is greatly expanded through an immediate follow-up critique utilizing sources such as the student teacher's own analysis, students' or peers' reactions, videotapes, and the supervisor.*

Overall, a major attraction of the micro-teaching format is that it simplifies the teaching activities and provides an opportunity for real experimental control and manipulation of variables in teaching (Allen & Eve, 1968).

2.1.2 Rationale for micro-teaching

In addition to the definitions of and essential conditions for micro-teaching, Cooper and Allen synthesized and presented the rationale for its application as a teacher training technique (1971). However, some of the following claims made about micro-teaching overlap the five essential conditions mentioned above.

1) *Micro-teaching is real teaching, reduces the complexities of normal classroom teaching, and permits greater control over the trainee's environment regarding students, feedback methods, supervision, and other aspects.*
2) *Knowledge and information about the student teacher's performance (through various sources of feedback) aids him/her in his/her acquisition of teaching skills.*
3) *Micro-teaching provides a setting in which the trainee can teach students of varying backgrounds, intellectual abilities, and age groups before teaching a real class.*
4) *Micro-teaching provides a low-threat and low-risk situation in which the trainee can reduce his/her anxiety level and fear of failure experienced by beginning teachers in actual classrooms.*
5) *Micro-teaching allows for spaced or distributed, repetitive practice over a period of time, necessary to overlearn skills that will be used during regular teaching.*

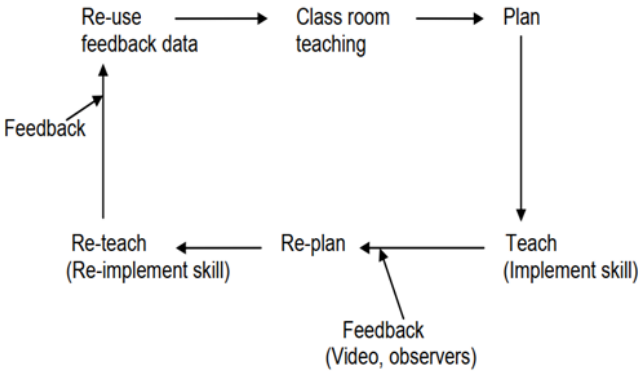
In general, micro-teaching has been a favorable teacher training technique because of its real, simplified, controlled, low-threat, low-risk, practical, and feasible nature. Therefore, the above rationale for micro-teaching can function as the foundation for its benefits later mentioned in Section 2.1.5.

2.1.3 Micro-teaching procedure and cycle

Traditionally, according to McKnight's description (1980), in a typical micro-teaching program, after a teaching skill is described for the trainee through a videotape of a master teacher modeling the skill, the trainee delivers a brief teaching performance which is videotaped and played back for review and feedback/critique from various sources including the trainee's supervisor, peers, students, and self-perceptions. The trainee later revises his/her lesson and teaches it again to a different group of students. The second teaching situation is also followed by a critique session.

Such a procedure is repeated until the trainee can master the identified teaching skills and has been known as the teach/re-teach format. The micro-teaching cycle is summarized and visually represented in Figure 1.

Figure 1. ***Micro-teaching cycle (adopted from Reddy, 2019, p. 69)***



As shown in Figure 1 (adopted from Reddy, 2019, p. 69), the trainee first plans his/her lesson based on a set of teaching skills which have been described and demonstrated or modelled by his/her supervisor. The trainee teaches the first lesson, which is usually observed by his/her supervisor and peers and videotaped for review and critique. Based on the given feedback, the trainee re-plans, revises the lesson, and teaches it again for another critique session. The cycle may repeat several times until the trainee can gain an adequate level of mastery of the designated teaching skills and apply them in actual classroom teaching.

Overall, this cycle resonates with the micro-teaching procedure as earlier described by McKnight (1980).

2.1.4 Applications of micro-teaching

Given the rationale for micro-teaching as presented in Section 2.1.2, micro-teaching can be applicable in a wide range of situations, contexts, and disciplines. Cooper and Allen (1971) summarized six main applications of micro-teaching as follows:

1) ***Preservice training****: This was the original purpose of micro-teaching when it was developed at Stanford University, which is the preservice training of student or intern teachers through their practice and acquisition of teaching skills.*
2) ***In-service training****: Several uses of micro-teaching for in-service teachers have been suggested. Micro-teaching can be used as one of the following: (a) as a trial framework for team presentation (experiments with new techniques in content and mode of presentation), (b) as a site for ascertaining the proper instructional level of materials, (c) as a method of pre-employment prediction (as a framework for selection or rating experienced teachers seeking employment), and (d) as a means of training supervisors to evaluate beginning teachers.*
3) ***Micro-counselling****: Through micro-teaching, trainees practice basic component skills of counseling such as attending behavior, the reflection of feeling, and summarization of feeling.*
4) ***Supervisor training****: Micro-teaching has great utility for training supervisors, especially with the strongly recommended use of videotape recorders in enhancing the supervisory effectiveness in observation and assessment of instruction.*
5) ***College teachers training****: Micro-teaching has been used to improve college teaching, for example, by developing teaching skills and techniques.*

6) ***Peace Corps Training****: Micro-teaching became a major component in the training of Peace Corps volunteers into English teachers.*

Apart from the six main applications above, micro-teaching has been employed in a wide variety of areas such as in (1) medical education (assisting medical students to acquire the skills of relating to patients), (2) administration and personnel (training administrators, secretaries, receptionists, politicians, or ministers presentation and communication skills), or (3) service areas (enhancing professional competence of social workers, psychiatrists, and police officers) (Allen & Eve, 1968).

2.1.5 Benefits and limitations of micro-teaching

This section examines the benefits and limitations of micro-teaching, primarily based on the review of some related theoretical papers on micro-teaching. Seven groups of benefits of micro-teaching can be identified as follows:

1) *Micro-teaching promotes real-time teaching experiences (Remesh, 2013), offers an opportunity for actual practice (Ralph, 2014), a real teaching situation for developing teaching skills (Reddy, 2019), opportunity to apply and practice the pedagogic theories student teachers learned (Azrai, Rini, & Suryanda, 2020).*

2) *It has a positive influence on student teachers' consciousness and perceptions about their teaching skills (Ismail, 2011) and helps to develop, improve, sharpen, accomplish, and master specific teaching skills and competencies (Ismail, 2011; Fernadez, 2012; Reddy, 2019; Azrai, Rini, & Suryanda, 2020).*

3) *Specifically, it helps student teachers develop timing, planning, asking questions, management of the class, using different materials and examples, and physical appearance during the teaching process (Saban & Çoklar, 2013); improved classroom use of language, introductory, procedure, and closure (Wangchuk, 2019), and lesson planning skill (Ralph, 2014).*

4) *Besides, micro-teaching provides expert supervision and constructive feedback on prospective teachers based on their individual differences in teaching behavior, especially with the support of video recordings of their performances (Ralph, 2014; Reddy, 2019).*

5) *Micro-teaching allows a chance to evaluate their own strengths and weaknesses (Saban & Çoklar, 2013), learn from trainees' peers' performances (Ralph, 2014), and is effective in understanding and modifying teaching behaviors (Reddy, 2019).*

6) *It increases the confidence of trainee teachers in their teaching (Ralph, 2014; Reddy, 2019; Wangchuk, 2019).*

7) *Finally, the typical characteristics of micro-teaching were also considered as its advantages, summarized by Ralph (2014), including (a) it is a vehicle of continuous training applicable at all stages not only to teachers at the beginning of their career but*

also for more senior teachers, (b) it enables the projection of model instructional skills, (c) it provides repeated practice (re-planning, re-teaching, and re-critique) without adverse consequences to the trainee teacher or his/her students, (d) it reduces the complexity of teaching process as it is scaled-down teaching (reduced class time, class size, and lesson content), and (e) it is a safe environment for prospective teachers to plan, teach, and reflect on their teaching.

However, six groups of limitations of micro-teaching can also be found throughout the literature.

1) *Sometimes, micro-teaching does not involve teaching actual students, deviates from normal classroom teaching, requires a special classroom setting, resulting in the lack of real experience regarding classroom conditions at school (Ralph, 2014; Reddy, 2019; Azrai, Rini, & Suryanda, 2020).*
2) *Student teachers experience initial nervousness about teaching their peers (Ralph, 2014).*
3) *There is limited class time, thus limited opportunities to reflect on trainees' own teaching (Lee & Wu, 2006).*
4) *Micro-teaching is skill-oriented (only focusing on a few specific skills), and content is not emphasized (Reddy, 2019).*
5) *A large number of trainee teachers cannot be given the opportunity for re-teaching and re-planning (Reddy, 2019).*
6) *Finally, micro-teaching is a very time-consuming technique and may raise administrative problems as regards arranging micro-lessons (micro-teaching episodes) (Reddy, 2019).*

In general, the benefits and limitations of micro-teaching will serve as the theoretical basis for the discussion of the study findings later presented in Section 4.

2.1.6 Other aspects of micro-teaching

To justify the study's conceptual framework, which is given in Section 2.3, the design of the questionnaire, the main data collection method in the study, and the implementation of OMT, some other components of micro-teaching are worth considering. Those components include (1) modeling and supervision, (2) feedback, (3) observation, (4) criteria for teaching evaluation, and (5) teaching skills.

First, Cooper and Allen (1971) stressed the importance of modeling, reporting that when videotaped modeling performance demonstrates desired behavior, trainees' ability to acquire modeled teaching skills in a transfer task is enhanced. Likewise, Grossman (2009) placed great value on supervision as part of professional development. Specifically, the important roles of the supervisor or teacher trainer are highlighted during the student teachers' planning stage when the supervisor provides them with the necessary knowledge and skills of teaching in

preparation for their micro-teaching episodes. Additionally, the supervisor helps to point out teacher trainees' teaching strengths and weaknesses in the feedback giving sessions.

Second, feedback is a very effective technique for modifying some teaching behaviors (Cooper & Allen, 1971). It plays a pivotal role in enhancing the preservice teachers' skills by enabling them to pursue a reflective teaching experience, reflecting on their strengths, and rectifying their errors (Wangchuk, 2019). As mentioned earlier, feedback can derive from various sources such as the student teacher's own analysis, students' or peers' reactions, videotapes, and the supervisor (Allen & Eve, 1968). To obtain information about a teaching performance for critique, feedback needs to be closely associated with observation.

Traditionally, classroom observation has occupied a prominent role in terms of its use as a tool by which to judge and subsequently promote good practice (O'Leary, 2004, cited in Leshem & Bar-Hama, 2008). Cooper and Allen (1971) summarized three main advantages of observation, including (1) observation broadens the experience of the observer and lessens the number of actual presentations by each trainee to alter his/her teaching behavior, (2) it enables the trainee to assess his/her own teaching behavior more critically, and (3) it results in a variety of creative approaches for presenting similar lessons or concepts. Some of the most common tools for observation are (1) observation forms, (2) detailed written notes on the lesson, (3) audio-recordings for reinforcement of written notes, and (4) video recordings (Leshem & Bar-Hama, 2008). However, whatever observation tools are used, teacher trainees need explicit criteria for effective teaching to identify the quality of their teaching (Leshem & Bar-Hama, 2008). Examples of criteria for assessment on an observation form were given by Leshem and Bar-Hama (2008, p. 259), consisting of:

1) ***instructional components****: clarity of instructions, sequence of activities, and classroom management;*
2) ***affective components****: giving feedback and reinforcement, awareness of students' needs;*
3) ***language components****: use of L1, oral, and written proficiency;*
4) ***cognitive components****: lesson planning, stating clear objectives, and designing activities to achieve lesson objectives; and*
5) ***metacognitive components****: the ability to analyze the lesson and to reflect upon their professional development.*

Those criteria were considered, together with the teaching skills synthesized by Cooper and Allen (1971) and Reddy (2019) regarding the design of the questionnaire used in the study. The following is the list of teaching skills summarized by Cooper and Allen (1971):

1) ***Frequency in asking questions*** *(asking as many questions as possible)*
2) ***Probing questions*** *(asking students for more information, asking them to justify their responses, prompting or giving them hints, refocusing their attention on a related issue*

or earlier responses)

3) ***Higher-order questions*** *(prompting students to use reasons/ideas instead of remembering information)*
4) ***Divergent questions*** *(requiring students to think creatively, asking them to make hypotheses and use their imagination to reorganize concepts into novel patterns)*
5) ***Reinforcement*** *(using positive reinforcement such as rewards to increase students' participation)*
6) ***Recognizing attending behavior*** *(observing students' verbal and non-verbal responses so that the teacher can make proper instructional and classroom management decisions)*
7) ***Silence and non-verbal cues*** *(controlled use of teacher silence to get students to speak and techniques of using non-verbal communication)*
8) ***Cueing*** *(giving students hints or clues regarding their answering questions or making comments to enhance their perception of success experience)*
9) ***Set induction*** *(ways of introducing upcoming activities and establishing common frames of reference between the teacher and students to facilitate communication)*
10) ***Stimulus variation*** *(techniques and behaviors to keep students attentive and alert throughout a lesson)*
11) ***Closure*** *(helping students to perceive a logical organization of the main points/ideas presented in a lesson and perceive a feeling of achievement through their ability to connect past and new knowledge at the end of a lesson)*
12) ***Lecturing*** *(delivery techniques, use of visual aids, pacing, etc.)*
13) ***Use of examples*** *(using examples relevant to students' experience and knowledge, relating examples to the principles or ideas being taught, asking students to give examples that illustrate the points of teaching to check their understanding or whether lesson objectives are met, and using analogies or metaphors to relate the unknown to the known)*
14) ***Planned repetition*** *(clarifying and reinforcing major ideas, keywords, principles or concepts in a lecture or discussion)*
15) ***Completeness of communication*** *(sensitivity training on the importance and difficulty of being understood, helping teaching to be more responsive to possible miscommunication)*

Reddy (2019) also gave a list of teaching skills for micro-teaching, most of which overlap Cooper and Allen's (1971) such as (1) Introduction skill (Set induction), (2) Reinforcement, (3) Skill of stimulus variation, (4) Skill of probing questions, (5) Silence and nonverbal cues, and (6) Skill of achieving closure. The remaining additional teaching skills are presented below.

1) ***Lesson planning*** *(with clear-cut objectives and an appropriate planned sequence. The content should be concise, appropriate, relevant, and could cover the specified duration.)*
2) ***Presentation and explanation skills*** *(Teacher enthusiasm, explanation, narration, giving appropriate illustrations and examples, planned repetition, and encouraging group discussion wherever necessary. The trainee teacher should be able to explain the concept by simple, relevant, rightly, and interesting examples to increase students' understanding.)*
3) ***The skill of stimulus variation*** *(The effective components of the skill are gestures (hand, facial, body), change in the speech pattern, voice variation and modulation (pitch, volume, speed), change in the interaction pattern, focusing, pausing movement, and emphasis on significant points) (added description from Reddy (2019))*
4) ***Proper use of audio-visual aids*** *(the key components for this skill are neatness, readability, adequate spacing, distinct size, proper spacing between words and lines, and use of relevant words or phrases*
5) ***The skill of black-board writing*** *(The components of the skill of black-board writing: legibility (easy to read), size and alignment (in a straight line), highlighting main points, utilization of the space, black-board summary, correctness, the position of the teacher, contact with students.)*
6) ***Classroom management (****Providing proper instructions, restricting inappropriate behavior, and calling the students by name are essentials of this skill.)*

Overall, the two lists of teaching skills above serve as the frameworks of reference regarding the design of questionnaire items on teaching competencies which are discussed later in Section 3.4.

2.2 Online micro-teaching (OMT) and relevant studies

This section explores how micro-teaching can be conducted online through a review of the most related studies.

It appears that no specific definition of online micro-teaching (OMT) can be found in the literature. However, a thorough review reveals four main ways in which micro-teaching takes place, highly associated with online tools for teaching. Online tools refer to any kinds of applications, programs, or software that are used on the Internet. Son (2011) classified online tools for language teaching into 12 categories, including:

1) ***Learning/content management systems*** *(LMSs/CMSs): Blackboard, Drupal, Joomla, Moodle, and Sakai*
2) ***Communication tools****: Gmail, Skype, TokBox, Windows Live Messenger, Yahoo! Messenger, Jabberwacky, Verbot, MyBB, phpBBTangler, and Voxopop*
3) ***Live and virtual worlds****: Elluminate, Livestream, OpenSimulator, ActiveWorlds, Second*

Life, Ustream, Wimba Classroom, and WiZiQ

4) ***Social networking and bookmarking sites****: Delicious, Diigo, Elgg, Facebook, Grouply, MySpace, Ning, SocialGo, LinkedIn, Twitter, Lang-8, and Livemocha*
5) ***Blogs and wikis:*** *Blogger, Edmodo, Edublogs, LiveJournal, WordPress.com, PBWorks, Wikispaces, and Penzu*
6) ***Presentation tools****: 280 Slides, Animoto, Empresser, Prezi, SlideRocket, and Zoho*
7) ***Resource sharing tools:*** *Google Docs, TitanPad, Zoho Writer, Box.net, Dropbox, VoiceThread, Xtranormal, Flickr, Picasa, MyPodcast, PodOmatic, Glogster, Screenr, Slideshare, PhotoPeach, Dipity, OurStory, Jing, SchoolTube, TeacherTube, VideoPress, Vimeo, WatchKnow, and YouTube*
8) ***Website creation sites****: Google Sites, Jimdo, KompoZer, Mahara, Movable Type, SnapPages, Weebly, Webnode, Webs, and Wix*
9) ***Web exercise creation tools****: ContentGenerator, SMILE, ESL Video, JClic, Hot Potatoes, Quia, Lingt and Listen and Write*
10) ***Web search engines****: Ask.com, Bing, Google, and Yahoo! Search*
11) ***Dictionaries and concordances****: Dictionary.com, Merriam-Webster Online, YourDictionary.com, Compleat Lexical Tutor, Forvo, Howjsay, Visuwords, OneLook Dictionary Search, and VLC Web Concordancer*
12) ***Utilities****: CalculateMe, CalendarFly, Doodle, ClustrMaps, Currency Converter, Dvolver Moviemaker, Google Earth, Lesson Writer, Storybird, Cacoo, Mindmeister, Mindomo, Remember the milk, SurveyMonkey, Voki, Time and Date, TinyURL.com, W3C Link Checker, Wallwisher, Wayback Machine, and Wordle*

The above categorization helps to give an overview of online tools to facilitate a better understanding of how any tools can be integrated into a micro-teaching procedure or episode. An emphasis on the implementation of micro-teaching episodes in the following research examples is placed; only the one that most fits the operational definition of OMT in the current study is closely reviewed.

First, Kelleci, Kulaksiz, and Pala's study (2018) illustrate the first way of how micro-teaching is conducted. The focus of the study is social network-supported micro-teaching (SNSM) which takes place in a two-phase process. In the planning phase, preservice teachers prepared lesson plans and posted them in a Facebook group for the supervisor's feedback. In the implementation stage, preservice teachers conducted micro-teaching sessions face-to-face in real classroom settings. They taught their peers, played the students' roles, the lesson in their revised lesson plans, and received feedback from their supervisor and peers at the end of the second stage. Google Drive, Google Forms, and Spreadsheets were used to upload the lesson plans in the Facebook group as well as to exchange feedback on the lesson plans and micro-teaching. Overall, despite the use of online tools, micro-teaching in this study, with no detailed

description, still took place face-to-face in real classroom settings, as traditionally depicted.

The next three studies show the second way of carrying out micro-teaching episodes, all of which were video-recorded and posted on an online platform. Specifically, Kusmawan (2017) considered micro-teaching in his study as OMT consisting of four key elements, namely video recordings, expert judgment, teacher judgment, and discussion forums. Elementary teacher participants of the study video-recorded their best teaching strategies within five to six minutes, while experts and other teachers gave their judgments on those micro-teaching episodes based on the given guidelines. All those video recordings and experts' and teachers' judgments were posted into the Smart Teacher Portal, created in 2011 with support from the World Bank under the program of Better Education through the Reformed Management and Universal Teacher Upgrading Project (BERMUTU). Afterward, a moderator, usually a lecturer knowledgeable about micro-teaching, moderated discussion forums in the same portal.

In Bodis, Reed, and Kharchenko's study (2020), however, the core component of the micro-teaching process is VoiceThread, a multimodal asynchronous computer-mediated communication tool that provides a space for students to upload their work in a secure environment, as well as receive feedback both from their teachers and peers. To prepare the preservice teachers for their final assessment of video-recording a mini-lesson and writing a self-reflection paper on their teaching, two VoiceThread micro-teaching tasks were assigned. VoiceThread task 1 asked the preservice teachers to video-record a lesson teaching a language skill or aspect such as pronunciation, and task 2 teaching any language focus. The instructors made modeling videos of micro-teaching samples, showed the technical capabilities of VoiceThread, and gave feedback. In short, all the video recordings, feedback, and self-reflection practice assignments were exchanged via VoiceThread. In the next study by Roza (2021), the video conferencing application Zoom was used for theory sessions on micro-teaching skills, while YouTube was the channel for student teachers to post their video-recorded micro-teaching lessons. Unfortunately, no detailed description of micro-teaching implementation was given in the study.

The last two studies demonstrate how micro-teaching can be conducted online using the synchronous mode of interaction but in two different manners. Ledger and Fischetti (2020) employed micro-teaching 2.0 in their study. Micro-teaching 2.0 refers to traditional micro-teaching in combination with SimLab HITL simulation technology as a virtual classroom. In simulation technologies, HITL refers to a human interactor working behind the scenes to enable synchronous voice and body responses. An HITL learning environment consists of four components: an interactor (trained improvisation actors and puppeteers to control the actions and responses of the avatars), avatars (symbols representing students in the virtual classroom), students (student teachers), and observers (experts or supervisors/instructors) connected via computer and Internet access. Each micro-teaching experience is recorded for feedback and self-reflection, but how feedback and self-reflection were provided was not described. Besides, some other examples of simulation technologies for micro-teaching include Kindergarten Classroom, simSchool, Second Life, TeachLivE™, Mursion™, and SimLab™ (Ledger &

Fischetti, 2020).

Unlike Ledger and Fischetti (2020), Ersin, Atay, and Mede (2020) studied micro-teaching conducted synchronously online with real people, not in a virtual classroom with avatars. This makes their study the most similar to the current one; therefore, it deserves a closer examination than the others above. The participants of the study were preservice teachers of an English Education program offered by a state university in Turkey. Due to Covid-19 outbreak, their theory sessions switched into the online mode via Zoom, and so did their micro-teaching sessions, as part of the so-called "e-practicum" followed by "e-mentoring". The study is aimed to explore the "e-practicum" and "e-mentoring" from the perspectives of the preservice teachers. Three major phases of the study include (i) preparation and construction phase before the “e-practicum”, (ii) the “e-practicum” itself, and (iii) the “e-mentoring” provided to preservice teachers afterward. In the first stage, six volunteer preservice teachers designed their lesson plans on the topics and content given on the syllabus for feedback from their e-mentor, a university supervisor. All communication took place in a WhatsApp group created by the e-mentor earlier. The “e-practicum” micro-teaching consisted of three forty-minute Zoom sessions. The sessions were held in a row with ten-minute breaks in between. During the sessions, four preservice teachers conducted reading lessons, and two of them speaking lessons to teach English as a foreign language. Right after the “e-practicum” micro-teaching sessions, the students (student teachers’ peers) shared their reflections, detailed feedback, and comments on the student teachers’ micro-teachings in the WhatsApp group. Finally, the e-mentoring was provided by the e-mentor to the student teachers one day after the “e-practicum” micro-teaching sessions. The e-mentor organized three forty-minute Zoom sessions for this purpose. The e-mentor identified the strengths and weaknesses of each student teacher's micro-teaching performance, making suggestions on problematic areas for improvement. Before the end of the "e-mentoring” sessions, the student teachers were asked to write their feelings and thoughts about “e-mentoring” in the WhatsApp group.

The findings from two interviews with the student teachers before and after the “e-practicum” revealed the participants’ feelings and thoughts about the “e-practicum” and “e-mentoring”. Generally, the participants held a positive attitude towards the “e-practicum” and “e-mentoring”, finding them useful, beneficial, achievable, and feasible. They also highlighted the importance of peers’ reflections and feedback, the e-mentor’s theoretical instructions, practical support, and feedback on micro-teaching sessions, which resonates with the ideas by Cooper and Allen (1971), Wangchuk (2009), and Grossman (2009) as mentioned earlier. In addition, four benefits the preservice teachers could gain from the "e-practicum" and "e-mentoring" include (1) experiencing online teaching practice (aligned with Remesh, 2013; Ralph, 2014; Reddy, 2019; Azrai, Rini, & Suryanda, 2020), (2) developing teaching skills and competences (aligned with Ismail, 2011; Fernadez, 2012; Reddy, 2019; Azrai, Rini, & Suryanda, 2020), (3) reducing their teaching anxiety, and boosting their confidence and readiness in teaching (aligned with Ralph, 2014; Reddy, 2019; Wangchuk, 2019) and teaching online, and (4) learning how to deal with problems posed in online teaching.

Apart from the benefits, during their micro-teaching sessions, the participants faced two main difficulties that are usually faced by teachers in online education: classroom management and technical problems. The participants said they had to struggle with how to keep the students engaged, how to prevent daydreaming, and how to control students' attention span. This problem is also one of the challenges of online teaching and learning given by Gillett-Swan (2017), and Yusuf and Jihan (2020). Further, the listed technical problems in the study entail not being able to broadcast the sound of the video recording, not being able to see the chatbox when they shared their screen or not being able to unmute the students on time, while Yusuf and Jihan (2020) emphasized both teachers' and students' limited access to the Internet. Three main suggestions were also made by the student teachers to address their problems. They suggested that (1) student teachers possess a calm attitude, (2) they make use of the virtues of online tools to facilitate the learning process, and (3) they build up their virtual experience and skills. The last suggestion is in line with Darling-Hammond's (2010, cited in Diana, 2013) recommendation, who believed that access to technology and training with technology significantly influences a teacher's ability to integrate technology into the classroom. Likewise, Gillett-Swan (2017) emphasized step-by-step instructions for how to access and use each of the platforms and technologies as one of the ways to overcome challenges of online teaching and learning, while Yusuf and Jihan (2020) highlighted the importance of providing workshops or training programs on management of online classes for educators.

Additionally, research on the disadvantages or challenges of online learning and teaching in the Vietnamese context is worth considering because OMT in the current study was conducted in Vietnam. For example, Nguyen and Duong (2021) explored the challenges facing students during their online learning using Microsoft Teams, which is a video conferencing application like Google Meet. The challenges include (1) Internet connection, (2) learning equipment (errors of laptop or Microsoft Teams software), (3) power failure, (4) lack of computer skills, (5) working in groups, and (6) students' having no self-motivation to study online. Meanwhile, Hoang and Le (2021) investigated Vietnamese teachers' challenges with their online teaching. Specifically, they claimed problems with (1) teachers' technology competence, (2) their virtual classroom management, (3) heavy workload, (4) students' motivation in online learning, (5) students' technology competence and technical support, (6) the institution's purposes and strategies of online teaching implementation (lack of training workshops on what kinds of tools they should use for their teaching, assessing, and even monitoring their virtual classes).

Further, seven main elements for effective online English teaching gleaned from Le's study (2021) encompass (1) teaching method, (2) course content, (3) learning activities (updated news delivery, games, polls, and student presentations), (4) myriad interaction (short questions), (5) learning incentives (bonus marks), (6) supportive learning environment (teacher voice, praise, encouragement, good teacher-student and student-student relationships, turning on webcams), and (7) supplementary materials. She also made four recommendations on providing effective online teaching, namely (1) structuring an effective course design, (2) creating community and engagement, (3) facilitating online interaction, and (4) supplying adequate learning support. It

can be implied from those four suggestions that the teacher plays an important role in delivering an effective online lesson, which is also agreed by Ngo (2021), who emphasized the teacher's role and their adequate training in online teaching to ensure students' engagement during online teaching and learning. The aforementioned findings by Vietnamese authors serve as a framework of reference for the questionnaire design, especially regarding the students' difficulties during their OMT and the discussion of the current study's findings.

In short, micro-teaching can be conducted online in four main ways: (1) face-to-face micro-teaching with technology-assisted administration process such as exchanging materials and feedback, (2) video-recorded micro-teaching lessons with technology-supported materials and feedback exchanges, (3) synchronously online micro-teaching in a virtual classroom with avatars moderated by an interactor, and (4) synchronously online micro-teaching with real people. Micro-teaching in the current study was conducted in a fourth way, and very few similar studies can be found in the Vietnamese context. Therefore, the current study is expected to bridge such a gap, thus contributing to research on OMT in Vietnam.

2.3 Conceptual framework of the study

Based on the review of micro-teaching and how micro-teaching can be conducted online in Sections 2.1 and 2.2, OMT in the current study refers to a combination of traditional micro-teaching with the support of online tools, namely a video conferencing program such as Google Meet for theory-oriented and micro-teaching sessions, and a learning management system, Google Classroom, to manage the courses, to exchange materials and discussions between the teacher and students. A detailed description of OMT episodes is given in Section 3.3.

3. Research methodology

3.1 Research setting and participants

The study was conducted at the Faculty of English Linguistics and Literature (EF), University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh City (USSH, VNUHCM). With the purposive sampling method, the participants were selected based on two main criteria: (1) they attended at least one of the teaching-related courses, namely Teaching Methodology, Teaching Practice 1, 2, or 3, undertaken by the researcher, and (2) they experienced OMT at the end of the course. Further, participants of the study enrolled in different study programs at the EF, including Standard, High-quality, and TESOL Certificate. However, the syllabuses for Teaching Methodology (TM), Teaching Practice (TP) 1, 2, or 3 are quite similar across the programs except that Teaching Practice 3 is only delivered in TESOL Certificate Program. Table 1 gives a brief description of the participants' backgrounds based on the data from questions 1 to 5 in the questionnaire.

Table 1. ***Participants' background information (N=100)***

Category	Items	Count/ Percentage (%)	Category	Items	Count/ Percentage (%)
Age	18-19	6	Courses taken	Teaching Methodology	86
	20-21	74		Teaching Practice 1	29
	22-over	20		Teaching Practice 2	12
Gender	Male	22		Teaching Practice 3	10
	Female	78		Using IT in Language Teaching	33
Year of study	Second-year	47		Teaching English to Young Learners	24
	Third-year	26		Materials Development for Language Teaching	29
	Fourth-year	15		Classroom-based Assessment	5
	Graduate	12			
Study program	Standard	69			
	High-quality	28			
	TESOL Certificate	10			

3.2 Research design and questions

To explore the EF students' perspectives on their OMT experiences, a survey research design was employed because surveys are useful for gathering factual information, data on attitudes and preferences, beliefs and predictions, behavior, and experiences – both past and present (Weisberg, Krosnick, & Bowen, 1996, cited in Cohen, Manion, & Morrison, 2007). Both quantitative and qualitative methods were used as regards data collection and analysis, which is further elaborated in Section 3.4. To achieve the study aim, three main research questions (RQ) were raised:

(1) What and how did the EF students learn from their online micro-teaching experience?

(2) What difficulties did they encounter during their online micro-teaching experience?

(3) What are their suggestions on how to improve online micro-teaching sessions?

3.3 Description of OMT sessions in this study

The following describes how the researcher implemented OMT in her classes. During the teaching-related courses, namely Teaching Methodology (TM) and Teaching Practice (TP) 1, 2, and 3, the researcher-cum-teacher-in-charge provided knowledge and instructions on English language teaching approaches, methods, and techniques. Once theory sessions were finished, the researcher guided the students to design their lesson plans in groups focusing on one aspect such as Grammar or Pronunciation or one of the four skills such as Listening or Speaking. Vocabulary teaching was recommended to be integrated into any lesson. The students posted their lesson plans in Google Classroom for the teacher's feedback. The students then delivered their OMT sessions, teaching their revised lesson plans as one final assessment task at the end of the courses. Afterward, those from the TM course took a written final exam, while those from TP courses submitted a reflection paper as a substitute for the final.

As regards OMT sessions, students, in groups, took turns to deliver their micro-teaching (OMT groups) within the given time limit while some others observed their peers (peer observation-PO-groups), and the rest played the role of students (volunteer student-VS-groups). Because TM courses are more theory-oriented than practice-oriented (TP 1, 2, and 3), their micro-teaching duration for TM students is less than for TP 1, 2, and 3 students. Moreover, the researcher utilized the existing micro-teaching evaluation form (also observation form) designed by herself and approved by the EF for those teaching-related courses. There are four main areas for assessment on the form, including (1) lesson effectiveness, (2) teacher's delivery, (3) teacher's language use, and (4) teacher's professionalism. Meanwhile, the reflection form for volunteer student groups consists of four open-ended questions, including (1) What did you learn? (2) What can you do after the lesson? (in relation to the lesson focus) (3) What do you like and dislike the most about the lesson? And (4) What suggestions/recommendations do you make to help improve the lesson? Table 2 gives a more detailed description of OMT episodes based on the conceptual framework of the study.

Table 2. ***Description of an OMT session (conducted by the researcher)***

1. Characteristics	
(1) *Delivery mode*: synchronous, via Google Meet (2) *Lesson focus (based on the approved Lesson plan)*: Grammar, Pronunciation, Listening, Speaking, Reading, Writing, (+ Vocabulary) (3) *Duration (per group)*: 45 minutes (TM), 60 minutes (TP 1&2), & 120 minutes (TP3) (4) *Duration (per student teacher)*: 9 or 12 minutes (TM), 15 or 20 minutes (TP 1&2), & 30 minutes (TP3) (5) *Student roles*: OMT groups, PO groups, & VS groups (6) *Forms*: the micro-teaching evaluation form, also used as the observation form (for the teacher-in-charge and observers), & a reflection form (for volunteer students) (7) *Feedback*: feedback based on the given forms (verbally given or typed in the chatbox), directly given at the end of each OMT session	
2. Procedure for an OMT episode	
Before OMT	• *OMT groups*: prepare the materials & equipment for their lesson • *PO groups*: prepare micro-teaching evaluation (PO) forms • *VS groups*: get ready to join the lesson • *Teacher-in-charge*: prepare micro-teaching evaluation (PO) forms
During OMT	• *OMT groups*: take turns to teach • *PO groups*: observe student teachers & take notes • *VS groups*: participate in the lesson • *Teacher-in-charge*: observe and evaluate
After OMT	• *OMT groups*: take notes of feedback • *PO groups*: give feedback on their peers • *VS groups*: give feedback on the student teachers • *Teacher-in-charge*: give final comments on each student teacher's strengths & weaknesses, feedback on the demonstration lesson, the lesson plan, & provide suggestions for improvement

3.4 Data collection and analysis

Both quantitative and qualitative data were collected in the survey. A questionnaire designed on Google Forms was delivered to 142 students who finished at least one of the teaching-related courses, namely TM, TP 1, 2, or 3, which the researcher was in charge of, but only 100 participants submitted their responses. The questionnaire consists of 17 questions. A brief description of 17 questions is given in Table 3. For quantitative data from questions 9 to 15, descriptive analysis was employed, focusing on measures of frequency. Meanwhile, qualitative data collected from questions 16 and 17 were analyzed using thematic analysis.

Table 3. ***Description of 17 questions in the questionnaire***

Question (Q)	Type of question	Purpose
Q1→Q5	Closed-ended (Multiple choice)	Participants' background information
Q6→Q8	Closed-ended (Checkboxes)	Participants' OMT experience
Q9→ Q13	Closed-ended (Checkboxes)	What participants learned from OMT (RQ1)
Q14	Closed-ended (Ranking)	How participants learned from OMT (RQ1)
Q15	Closed-ended (Checkboxes)	What difficulties participants faced during OMT (RQ2)
Q16→Q17	Open-ended (Short answers)	Participants' suggestions on how to improve OMT (RQ3)

The following justifies the statements used in the questionnaire. For questions 10 to 13, the participants were given a list of statements beginning with "I am able to" followed by specific actions they could do during the OMT to describe their teaching competencies. The rationale for those statements consists of (1) the course syllabus, (2) the micro-teaching evaluation form, (3) the teacher's instructions and supervision, and (4) the teaching skills (Cooper & Allen, 1971; Reddy, 2019) and observation criteria (Leshem & Bar-Hama, 2008), reviewed in Section 2.1.6. Table 4 presents the alignment between the teaching competencies in the questionnaire and those reviewed in the literature. However, though some skills or competencies such as selecting, designing, and using materials, problem-solving, and demonstrating teacher's characteristics such as dressing and appropriate attitude, and teacher preparation do not receive theoretical support from previous studies, they are still worth exploring on the grounds of the course syllabus, the micro-teaching evaluation form, and the teacher's instructions and supervision.

Table 4. ***Alignment between the teaching competencies in the questionnaire and teaching skills (Cooper & Allen, 1971; Reddy, 2019) and observation criteria (Leshem & Bar-Hama, 2008)***

Teaching competencies in the questionnaire	Reviewed ideas in Section 2.1.6	Relevant authors
(1) Lesson planning & Teaching techniques	Lesson planning, sequence of activities, setting clear objectives, & designing activities to achieve lesson objectives	Leshem & Bar-Hama (2008)
	Lesson planning skill	Reddy (2019)
	Proper use of audio-visual aids	Reddy, 2019
	Introduction skill (set induction) & skill of achieving closure	Cooper & Allen (1971) Reddy (2019)
(2) Teacher's delivery & Language use	Clarity of instructions, giving feedback and reinforcement	Leshem & Bar-Hama (2008)
	Reinforcement, skill of stimulus variation, skill of probing questions, & silence and nonverbal cues	Cooper & Allen (1971) Reddy (2019)
	Presentation and explanation skills	Reddy (2019)
	Frequency in asking questions, higher-order questions, divergent questions, cueing, lecturing, use of examples, planned repetition, & completeness of communication	Cooper & Allen (1971)
	Oral and written proficiency	Leshem & Bar-Hama (2008)
(3) Teacher's Professionalism	Recognizing attending behavior	Cooper & Allen (1971)
	Classroom management	Leshem & Bar-Hama (2008)
	Classroom management	Reddy (2019)

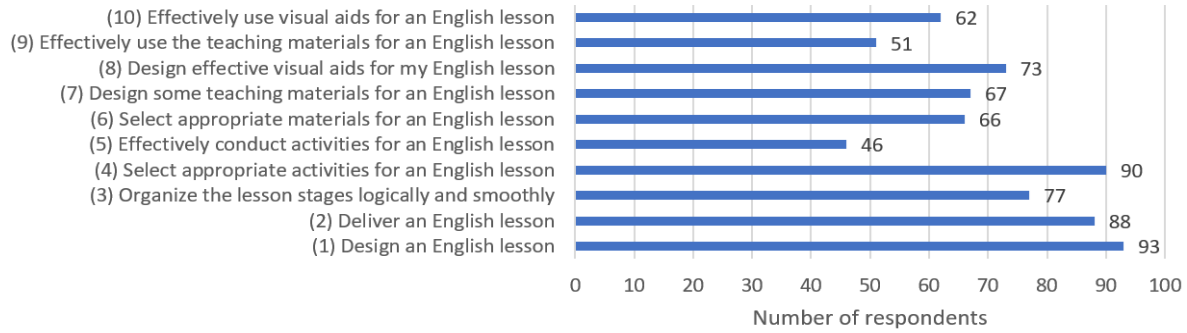
Similarly, a list of "I am able to" statements was included to describe what the participants could do with technology to conduct their OMT, labeled as Digital competence. The statements were made based on the three main components of an online classroom, including (1) delivery and reception of information content, (2) interaction between, among students and teacher, and (3) student rehearsal and practice (Berge, 2000). To better understand how the participants learned what they thought they could learn, question 14 asked the participants to rank the importance of different components of micro-teaching, as discussed in Sections 2.1.5 and 2.1.6. Finally, the statements for students' difficulties in question 15 are primarily gleaned from studies by Gillett-Swan (2017), Ersin, Atay, and Mede (2020), Yusuf and Jihan (2020), Nguyen and Duong (2021), Hoang and Le (2021), and Le (2021).

4. Results and Discussion

4.1 What and how the EF students learned from their OMT experience

To answer question 9 "What did you learn from your OMT experience?", 98% of the respondents selected "Teaching competence" and 74% "Digital competence." Data from the participant's responses to questions 10 to 13 show that all participants claimed they could learn both teaching and digital competencies to varying degrees. For Lesson planning & Teaching techniques, a high percentage of respondents, between 77% and 93%, said they could design and organize the lesson and select activities. A little more than half of them, from 62% to 73% said they could select and design materials and effectively design and use visual aids. However, a small number of respondents, 46% and 51%, though they could effectively conduct the activities and effectively use the teaching materials, respectively. Figure 2 illustrates the data for Lesson planning and teaching techniques.

Figure 2. ***Lesson planning and teaching techniques***



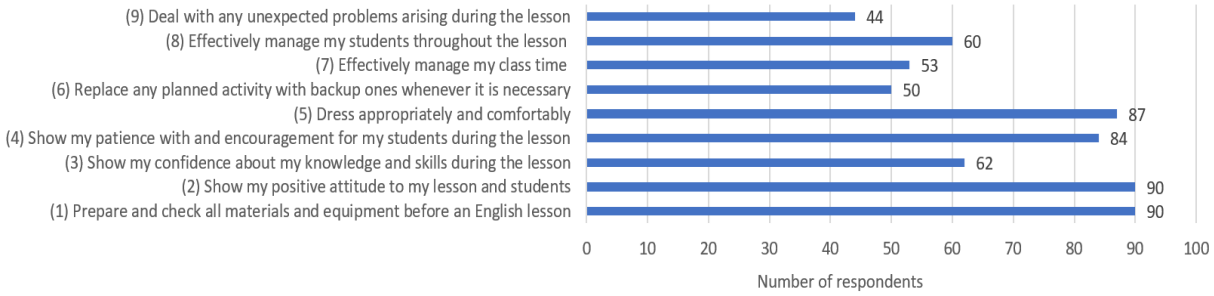
As regards Teacher's delivery and Language use, a high proportion of participants, between 76 and 80%, believed they could present adequate and relevant theory and give appropriate instructions during the lesson. Around 60% to 70% of the respondents thought they could efficiently employ their presentation skills, including delivery manner, body language, voice quality, background avatar, language use, interaction with their students via examples, CCQs (concept checking questions), explanations, answers, feedback and comments, and student encouragement. Finally, approximately less than 50% seemed not to be confident about their abilities to (1) control their speaking rate and amount, teaching pace, tone of voice, (2) promote understanding between teacher-students, (3) relate students to their background knowledge/personal life, (3) promote student-student interaction and collaboration, and (4) draw students' attention to the lesson. Table 5 illustrates the data for Teacher's delivery & Language use.

Table 5. ***Teacher's delivery & Language use***

"I am able to" statement	**Count/ Percentage (%)**
(1) Present adequate and relevant theory on the taught subject	78
(2) Deliver my lecture smoothly and adequately in terms of speaking rate and teaching pace	54
(3) Deliver my lecture in an enthusiastic, communicative, and lively manner	65
(4) Appropriately use my body language (e.g., eye contact, facial expressions, hand gestures)	60
(5) Select a formal and appropriate background in my avatar (OMT)	67
(6) Effectively use my voice (e.g., loud, and clear enough, and easy to follow)	68
(7) Effectively use my tone of voice (e.g., interesting, engaging, and varied)	49
(8) Understand my students well (e.g., what they are saying, what they mean)	57
(9) Be well understood by my students (e.g., what I am saying, what I mean)	52
(10) Use accurate and easy-to-understand English pronunciation	64
(11) Use accurate and easy-to-understand English grammar	72
(12) Use schema theory (e.g., asking questions) to activate my students' prior and existing knowledge about the taught subject	50
(13) Give adequate examples to illustrate the theory as well as the exercises in an English lesson	65
(14) Balance teacher talking time and student talking time	40
(15) Give clear and easy-to-follow instructions	80
(16) Relate the lesson (e.g., theory, vocabulary) to students' personal life (i.e., personalization)	47
(17) Provide social/background knowledge related to the lesson topic	42
(18) Use ICQs (instruction checking questions) to check students' understanding of the instructions for an activity or a task	76
(19) Use CCQs (concept checking questions) to check students' understanding of new concepts or theory in an English lesson	65
(20) Draw students' attention (e.g., asking checking questions) to the lesson when they show some signs of distraction or boredom	44
(21) Give students adequate feedback and comments during the exercise correction	60
(22) Give students adequate explanations and answers for their questions	65
(23) Encourage students to participate in the class activities	60
(24) Promote student-student interaction and collaboration (e.g., by asking them to work in pairs or groups)	50

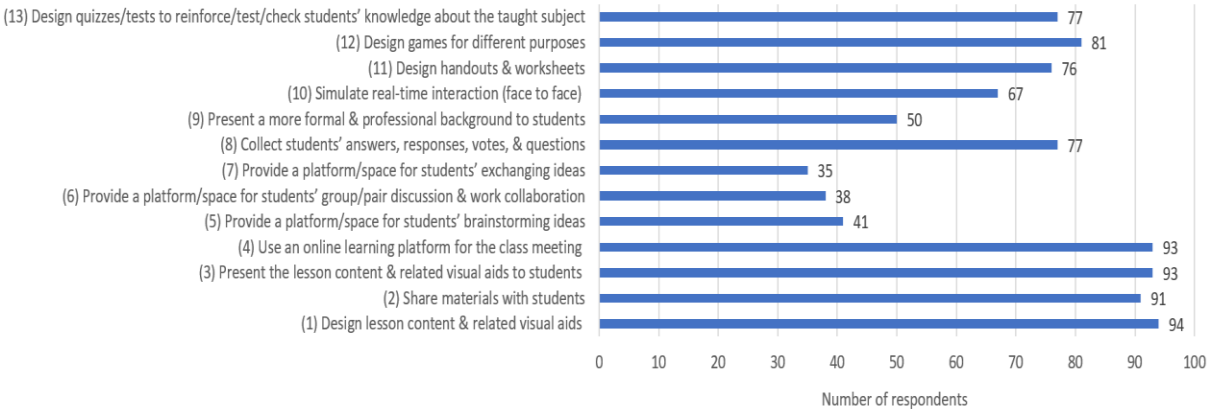
When it comes to Teacher's professionalism, a large number of respondents, from 84% to 90%, believed in their abilities in preparation, showing appropriate attitudes and dressing style during the OMT. 60% and 62% of the participants said they could show their confident demeanor and manage their students, while nearly half thought they could manage the class time and deal with unexpected problems. Figure 3 illustrates the data for Teacher's professionalism.

Figure 3. ***Teacher's professionalism***



Finally, the participants revealed how they could use technology during their OMT episodes. Specifically, between 76% and 94% said they could use technology to design and present the lesson content, a little over half can simulate real-life and real-time interaction, while below 50% can provide effective platforms for students' collaboration. The data for Digital competence is presented in Figure 4.

Figure 4. ***Digital competence***



Overall, what the participants could learn from OMT corroborates the findings yielded in the study by Ersin, Atay, and Mede (2020) in a way that OMT helps the student teachers to develop their teaching skills and competencies, which is also one of the key benefits of micro-teaching (Ismail, 2011; Fernadez, 2012; Reddy, 2019; Azrai, Rini, & Suryanda, 2020). Further, the student teachers believed they could handle an online classroom, which is aligned with Ersin, Atay, and Mede's findings (2020), with how they could apply technology to fulfill the three main functions of an online classroom (delivery and reception of information-content, interaction between, among students and teacher, and student rehearsal and practice), put forward by Berge (2000).

Next, question 14, whose results are displayed in Table 6, was raised to answer how the participants learned from their OMT episodes. As shown in Table 6, the most important way that helps the student teachers to learn their teaching and digital competencies is by receiving feedback from the teacher, observers, and volunteer students, one of the biggest strengths of micro-teaching (aligned with Cooper & Allen, 1971; Ralph, 2014; Wangchuk, 2019; Reddy, 2019). The second most important way is by following the teacher's instructions and guidelines,

which is aligned with the emphasis of the instructor/teacher's role in micro-teaching (aligned with Cooper & Allen, 1971; Grossman 2009; Ralph, 2014; Reddy, 2019). The next three ways, in a decreasing order of importance, include the experience of micro-teaching itself, another benefit of micro-teaching aligned with Remesh (2013) and Ralph (2014), self-reflection, and observation and giving feedback (or evaluating on each other's OMT performances), which are believed to be important and useful in micro-teaching by previous authors such as Cooper and Allen (1971), O'Leary (2004, cited in Leshem & Bar-Hama, 2008), Saban and Çoklar (2013), and Ralph (2014). Finally, the participants could learn from OMT thanks to the criteria for OMT provided by the teacher, which resonates with the importance Leshem and Bar-Hama (2008) placed on the criteria for MT evaluation to ensure the quality of micro-teaching sessions.

Table 6. ***The levels of importance of how student teachers learned from OMT***

Items	Total frequency	Levels of importance
By observing and giving feedback on the other peers' teaching	300	5
By delivering an online micro-teaching section	**383**	**3**
By using the criteria for OMT evaluation provided by the teacher	254	6
By receiving feedback from the teacher, observers, & volunteer students	**439**	**1**
By following the teacher's instructions & guidelines	**390**	**2**
By self-reflecting on my own teaching after OMT & during my peer observation	334	4

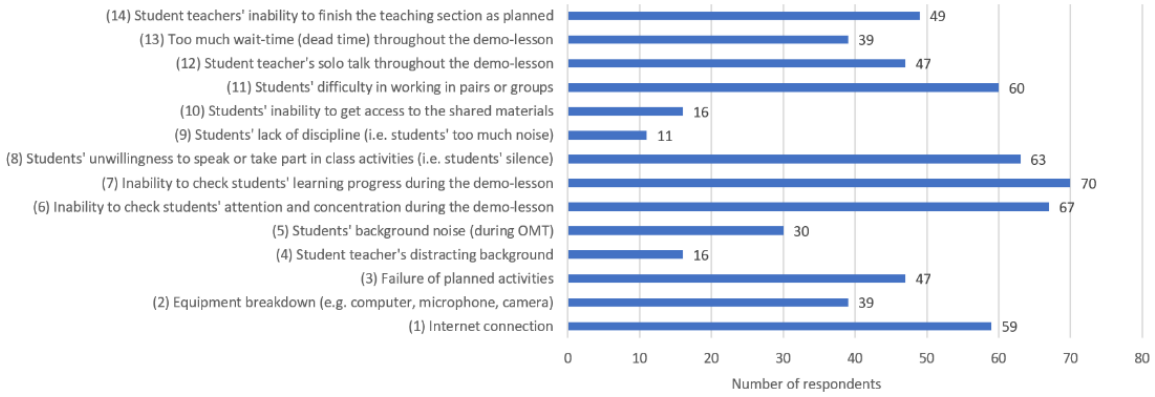
4.2 What difficulties the EF students encountered during their OMT experience

The data from question 15, presented in Figure 5, reveal two main kinds of difficulties student teachers face during their OMT, including mostly online teaching-related and technology-related. Very few participants (11% to 30%) had difficulties with (1) the student teacher's distracting background, (2) students' background noise and lack of discipline, and (3) their inability to get access to materials. The next group of respondents, occupying from 39% to 49%, had difficulty in dealing with (1) failed activities, (2) teacher's solo talk, (3) too much wait-time, (4) their inability to finish the teaching section as scheduled, and (5) their equipment. The largest group of participants, which makes up 59% to 70%, a not so high percentage though, said they faced such challenges as (1) how to check students' progress/attention/concentration, (2) students' unwillingness to work, and students' difficulty with collaboration, and (3) the Internet connection. In general, the participants' greatest difficulties during OMT can be categorized into three big groups, which are also faced by in-service teachers while teaching online, including (1) checking students' learning progress/attention/concentration (aligned with Gillett-Swan, 2017; Yusuf & Jihan, 2020; Ersin, Atay, & Mede, 2020; Hoang & Le, 2021), (2) promoting students' participation, engagement, and collaboration (aligned with Yusuf & Jihan,

2020; Nguyen & Duong, 2021), and (3) technical problems (Internet connection & teaching equipment) (aligned with Yusuf & Jihan, 2020; Nguyen & Duong, 2021).

In addition, Gillett-swan (2017) believed that digital literacy skills can be a hindrance to the online learning environment; however, the results above might implicate that the student teachers do not have much trouble with those skills. Also, the participants' suggestions, presented in Section 4.3, may help address the difficulties they encountered during OMT.

Figure 5. ***Difficulties faced by the student teachers during OMT***



4.3 What suggestions the EF students made on improving OMT sessions

The participants' suggestions can be categorized into suggested tools for OMT, suggestions on Teaching competence (TC) and Digital competence (DC). The top ten suggestions on Teaching and Digital competence from question 16's data are summarized in Table 7.

Table 7. ***Top ten suggestions on OMT***

Suggestion	Category	Frequency
1. Have backup plans in case of problems	TC & DC	15
2. Design interesting activities (fun icebreakers, games)	TC	13
3. Design some activities for students to interact with each other easily	TC	12
4. Check equipment carefully before start	DC	10
5. Give rewards/ bonuses for voluntary/correct answers	TC	10
6. Call students unexpectedly rather than let them volunteer at all times (use Wheel of names, let more students speak)	TC	10
7. Ask students to turn on their camera	TC	8
8. Ask more ICQs and CCQs	TC	7
9. Familiarize the student teachers with the platforms and tools before OMT / rehearse OMT with timekeeping	TC	5
10. Give students quick quizzes (that need to be answered in 3 or 4 minutes) to stimulate their concentration	TC	5

The other recommendations mentioned once, twice or three times include: (1) show students where they can get technical support, (2) send materials to students in advance, (3) check all

the links and sources for materials carefully before getting started, (4) engage students: use videos and varied activities, do not conduct too many activities, use the chatbox, let students lead the activities, create a friendly learning environment, give students time for questions and practice, and improve the quality of Teacher Talking Time (TTT) by giving more hints and prompts to the teacher's questions, repeating the key points, presenting the theory briefly, and giving detailed and easy-to-follow instructions, and (5) manage the classroom by letting students host the online meeting room, asking students to turn off their microphones, sometimes asking them to share screen to check their attention, selecting an appropriate background, being well-dressed, and giving students more time to fix technical problems.

Overall, the participants' suggestions, some of which are in line with some previous authors', center around Teaching competence, especially in the context of online teaching and learning. All those suggestions can be grouped into:

(1) backup plans;

(2) preparation (equipment and materials);

(3) training and rehearsal with tools and OMT (aligned with Darling-Hammond, 2010, cited in Diana, 2013; Gillett-Swan, 2017; Yusuf & Jihan, 2020; Ngo, 2021);

(4) engagement methods: a) activities (interesting, varied, sufficient) and "content beyond lectures" (e.g., games, quizzes, and videos) (aligned with Le, 2021), b) collaboration and practice tasks (aligned with Le, 2021), c) rewards/bonuses (aligned with Le, 2021), d) ICQs/CCQs, e) sudden calls/screen check, f) students' camera on (with teacher's encouragement and patience) (aligned with Le, 2021), g) chatbox, h) improved quality of TTT, i) a friendly and active learning environment (aligned with Le, 2021);

(5) classroom management and professionalism: a) students' microphones off, b) allowing students to host the meeting room, c) selecting appropriate background and dressing style, d) giving students more time to fix technical problems.

Additionally, question 17 explores what online tools (e.g., applications or platforms) the student teachers used and would recommend for future OMT episodes, supported by one suggestion made in Ersin, Atay, and Mede's study (2020). The suggestion is to make use of the virtues of online tools to facilitate the learning process. The top list of tools the participants suggested includes (1) Google Meet/Docs/Classroom/Slides/PowerPoint/Hangouts/Forms, (2) Zoom, (3) Microsoft PowerPoint/Word, (4) Kahoot, and (5) Canvas, Quizizz, and Quizlet. Those tools serve different purposes in an OMT episode based on the Teacher's Digital competence, as mentioned in Section 4.1 (see Appendix for the comprehensive list of all suggested tools).

Overall, the current study confirms one of the key benefits of traditional micro-teaching, which is to help the student teachers develop their teaching skills and competencies through the essential components of traditional micro-teaching such as observation, feedback, and self-reflection, and supervision. More importantly, a contribution of the study is a specification of

digital competencies the student teachers believed they could learn from their OMT experience. This is important in making OMT a feasible and useful teacher training technique, given the technological advances in the 4.0 era. In addition, the difficulties, mainly associated with online classroom management and technical problems, faced by the student teachers in the study are similar to those faced by existing students and teachers during online teaching and learning. To address those problems as well as to improve future OMT episodes, a list of suggestions was given by the student teachers. This is where another contribution of the study emerges. Apart from the already mentioned suggestion of training and rehearsal with tools and OMT, the student teachers provided very specific strategies and techniques to deal with online classroom management (e.g., students' attention, engagement, and participation) and technical problems (e.g., Internet connection and teaching equipment), plus recommending online tools for different purposes in an online classroom.

5. Conclusion

In short, three conclusions were reached in relation to the three research questions earlier put in the paper. First, the student teachers in the study believed they could develop their teaching and digital competencies from their OMT experiences. Teaching competencies include (1) Lesson planning and Teaching techniques, (2) Teacher's delivery and Language use, and (3) Teacher's professionalism. Meanwhile, digital competencies cover abilities that they could use to serve the three main functions of an online classroom concerning (1) delivery and reception of information content, (2) interaction between, among students and teacher, and (3) student rehearsal and practice. Also, the student teachers reflected their thoughts about the different components of micro-teaching, through which they could learn and develop their teaching and digital competencies, by ranking their importance. The decreasing order of importance of their means of learning from OMT is: (1) by receiving feedback from the teacher, observers, & volunteer students, (2) by following the teacher's instructions and guidelines, (3) by delivering an online micro-teaching section, (4) by self-reflecting on their own teaching after OMT and during their peer observation, (5) by observing and giving feedback on the other peers' teaching, and (6) by using the criteria for OMT evaluation provided by the teacher.

Second, the study results show three main difficulties facing the student teachers during OMT, namely (1) checking students' learning progress/attention/concentration, (2) promoting students' participation, engagement, and collaboration, and (3) technical problems (Internet connection and teaching equipment). Last, the student teachers provided suggestions on how to improve OMT episodes in the future. The suggestions consist of useful tools for OMT such as (1) Google Meet/Docs/Classroom/Slides/PowerPoint/Hangouts/Forms, (2) Zoom, (3) Microsoft PowerPoint/Word, (4) Kahoot, and (5) Canvas, Quizizz, and Quizlet (see Appendix 1 for the exhaustive list of online tools for OMT). As regards the online teaching and learning aspect of OMT, the participants recommended five key solutions: (1) backup plans, (2) preparation, (3) training and rehearsal with tools and OMT, (4) engagement methods, and (5) classroom management and professionalism (see Section 4.3 for more details).

Overall, the study's findings show that from the student teachers' perspectives, OMT offers benefits that traditional micro-teaching does, particularly in helping the student teachers practice and develop their specified teaching skills and competencies. Therefore, OMT is highly recommended as an alternative teacher training technique in various programs, especially in English Language Teaching, which the current study focused on. That is also a trend given the continuous outbreaks of Covid-19 pandemic as well as the possible needs and demands of online teaching and learning in the 4.0 era.

Like any other studies, the current one has its own limitations. Due to the small scope of the paper, the study did not include in-depth interviews to gain the participants' deeper insight into their responses as previously planned. Also, OMT sessions were not video recorded for more thorough analysis because of the student teachers' shyness and discomfort during their first-time experience with OMT. Therefore, further research on OMT can take those two factors into consideration. Besides, future research can continue delving into how technology integration facilitates and promotes OMT, or how OMT can be effectively combined with other methods/techniques in English teacher education, especially in the digital era.

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Biodata

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Appendix. ***The exhaustive list of suggested tools for OMT with their specific purposes***

Purposes	**Recommended tools**	**Count / Percentage (%)**	**Purposes**	**Recommended tools**	**Count / Percentage (%)**
1. Design lesson content & related visual aids (e.g., slides)	1. Microsoft PowerPoint	40	8. Collect students' answers, responses, votes, & questions	1. Google Forms	10
	2. Google Slides	25		2. Google Meet, Google Docs	8
	3. Canvas	9		3. Google Classroom, Zoom	6
	4. Google Docs	8		4. Kahoot	3
	5. Powtoon, Quizlet	3		5. Poll Everywhere, Facebook Messenger	2
	6. Kahoot, Prezi	2		6. Gmail, Slido, Quizlet Microsoft, Class Dojo, Schoology, Shub Classroom, Google Hangouts, Google Sheets, Zalo, Padlet, Google Jamboard	1
	7. Slidego, Miro, Skype, Microsoft Word	1			
2. Share materials with students	1. Google Meet	24	9. Present a more formal & professional background to students	1. Google Meet	24
	2. Zoom	21		2. Zoom	9
	3. Google Docs	18		3. Canvas	2
	4. Google Classroom	10		4. Snapchat, Miro, Google Hangouts, Google Docs, Google Slides, Microsoft Teams	1
	5. Google Slides	4			
	6. Google Sheets, Google Hangouts, Google Drive, Facebook Messenger	2			
	7. PDF File, Miro, Skype Shub Classroom, Microsoft Word, Gmail, Google Jamboard, Microsoft Teams	1			

3. Present the lesson content & related visual aids to students (e.g., slides)	1. Google Meet	30		10. Simulate real-time interaction (face to face) (e.g., using the camera, microphone)	1. Google Meet	24
	2. Zoom	22			2. Google Hangouts	16
	3. Google Slides	12			3. Zoom, Microsoft Teams	1
	4. Microsoft Powerpoint	9				
	5. Google Docs, Canvas	4				
	6. Powtoon, Videos, Charts, Images, Skype, Google Hangouts, Prezi, Quizlet, Microsoft Teams	1				
4. Use an online learning platform for the class meeting (e.g., Google meet)	1. Google Meet	51		11. Design handouts & worksheets	1. Google Docs	31
	2. Zoom	29			2. Microsoft Word, Microsoft Powerpoint	7
	3. Microsoft Teams	2			3. Google Slides	6
	4. Google Docs, Miro, Facebook Messenger, Google Hangouts	1			4. Canvas	5
					5. Google Sheets	3
					6. Powtoon	2
					7. Google Meet, Kahoot, Socrative, Google Classroom, Microsoft Excel	1
5. Provide a platform/space for students' brainstorming ideas	1. Google Docs	25		12. Design games for different purposes	1. Kahoot	28
	2. Zoom	10			2. Microsoft Powerpoint	9
	3. Google Meet	8			3. Quizizz	8
	4. Google Jamboard	6			4. Bamboozle	6
	5. Google Slides	5			5. Quizlet	4
	6. Microsoft Word, Mural	2			6. Canvas, Wordwall, Skribbl, MyPuzzle, Edmodo, Google Slides, Google Jamboard, IXL Learning, Puzzlemaker,	1

					Mentimeter, My Aloha	
	7. Miro, Microsoft Powerpoint, Lucidchart Padlet, Mindmap, Google Forms, Facebook Messenger, Microsoft Forms, Microsoft Teams	1				
6. Provide a platform/space for students' group/pair discussion & work collaboration	1. Google Meet	23		13. Design quizzes/tests to reinforce/ test/check students' knowledge about the taught subject	1. Kahoot	34
	2. Zoom	22			2. Quizizz	18
	3. Google Docs	14			3. Quizlet	9
	4. Facebook Messenger	3			4. Google Forms	8
	5. Kahoot, Google Slides, Google Jamboard	2			5. Socrative	5
	6. Zalo, Miro, Quizlet, Padlet, Microsoft Teams	1			6. Microsoft Powerpoint	3
					7. Google Docs, Bamboozle, My Aloha	2
					8. MyPuzzle, Mentimeter, Edmodo, Google Slides, Microsoft Word	1
7. Provide a platform/space for students' exchanging ideas	1. Google Meet	25				
	2. Zoom	21				
	3. Google Docs	11				
	4. Padlet, Google Jamboard	2				
	5. Miro, Quizlet, Kahoot, Schoology, Facebook Messenger, Zalo, Google Forms, Slides, Microsoft Teams	1				

AsiaCALL Online Journal
ISSN 1936-9859; https://asiacall.info/acoj
Vol. 13, No. 1, 2022
pp. 73-81

Received: 08/10/2021
Revision: 08/11/ 2021
Accepted: 18/11/ 2021
Online: 20/11/ 2021

A Neuroscientific Approach to Understanding Listening Comprehension in EFL Contexts

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EOI: http://eoi.citefactor.org/10.11251/acoj.13.01.004

Abstract

The potential relevance of neuroscience to education has been gaining attention from scholars and educators in recent years. As stated by Tokuhama-Espinosa (2021), the professionalization of great teachers involves not only the content and pedagogical knowledge but also the ability to leverage technology based on the understanding of brain efficiency. In this sense, the current paper attempts to bring five applicable principles emerging from neuroscientific findings into the context of language learning and teaching, particularly the development of listening skills. The paper begins by presenting some nuggets of neuroscientific knowledge related to language learning, which opens a novel perspective of conceptualizing the process of listening comprehension. It will then go on to a proposal of a brain-based listening technique as an alternative to teach listening.

Keywords: neuroscience, language learning, listening comprehension, brain-based listening

1. Introduction

Neuroscience is referred to as the science of the nervous system (Churches et al., 2017). Neuroscience can be considered another source of evidence that can contribute to evidence-based practice and policy in education. According to Dubinsky et al. (2019), knowing neuroscience is essential to understand better how students' brains work and how teachers can contribute to its functionality to facilitate language learning and improve the effectiveness of their teaching techniques. Knowledge of neuroscience can be a powerful way to inform teachers of the theoretical bases for established or new classroom practice because it can affect teachers' views of learning. Besides, it also provides a mental framework for teachers to understand nuanced psychological factors that influence classroom practice.

Numerous scholars have suggested integrating the latest neuroscience findings into education practice from different perspectives in recent years. For instance, the Brain-Targeted Teaching Model of Hardiman (2012) gives teachers an instructional framework based on neuro and cognitive sciences research about how the brain and mind work. The six brain targets, representing six stages of the teaching and learning process, highlight the emotional and

physical learning environments, designing instructions to enable students to demonstrate mastery of content and apply knowledge in creative problem-solving. Meanwhile, Zadina (2014) develops a multiple pathways model to raise teachers' awareness of the many pathways involved in learning. His core assumption is that understanding how the brain learns and what is required before introducing new information is essential to orchestrate optimal learning. Similarly, Taylor and Marienau (2016) introduce the notion of Theatre of Knowing as a visual metaphor and storyboard for how learning occurs. The concept describes the interwoven relationships between two factors: the external and internal environment. They argue that educators can figure out how the brain engages in learning and how teachers engage in facilitation by comprehensively viewing this multifaceted relationship.

Likewise, Posey (2019) put an emphasis on brain-based teaching strategies and a demand for attending to the social-emotional needs of learners by proposing a Universal Design for Learning. This design portrays a systematic and proactive way to design learning experiences based on three identified brain networks involved in learning: recognition network (perception, language, comprehension); strategic networks (how we physically act, express and integrate executive function skills); affective networks (interest, effort, self-regulation). Later on, Jensen and McConchie (2020) posit that how the brain operates can offer solutions for finding the best condition to maximize learning. They put forward an approach that stresses the Engagement of Strategies based on Principles of how the brain learns (ESP approach). The most up-to-date argument may come from Tokuhama-Espinosa (2021), who promotes six evidence-support fundamental concepts about the brain and learning. On this premise, she builds 21 learning tenets covering several topics across a range of human variance, which underscores the learners' differences. She uses these principles to create 40 evidence-informed pedagogies for online and face-to-face teaching, believing that these can serve certain purposes of teaching and learning needs in different contexts.

All things considered; the abovementioned authors have acknowledged the enormous contributions of neuroscientific findings in terms of understanding learning mechanisms in the brain. Their attention may be drawn to different facets of the learning brain. Still, they all underlie the notion that creating an optimal learning environment requires the awareness of how the brain works to make learning happen. On the one hand, this knowledge offers a transformational viewpoint on teachers' professional practice. Teachers can gain more insights into the learning mechanism and then develop the appropriate approach to make it happen. On the other hand, this knowledge also gives learners a good reason to be persuaded by the teachers' methods or strategies to maximize students' learning.

Given the emergence of this interdisciplinary approach in education, the author attempts to present five fundamental principles concerning the human brain's nature associated with language learning. These principles are distilled from an extensive review of secondary resources from both educational and neuroscientific disciplines. To avoid misinterpretations of these results, the author examines different perspectives from various neuroscientists to detect the most common evidence. Subsequently, the data is also triangulated by revising numerous

educators' translations of these findings and their application. In this way, the content of the five principles is validated. The author also seeks to describe the L2 listening comprehension regarding the underlying concept of these principles. As a result, a brain-based listening technique is proposed as an alternative to the teaching of listening comprehension.

2. Neuroscience-based principles for language learning

The first and foremost principle about the human brain is that each brain is unique in terms of genetic makeup and neural pathways shaped by individual life experiences (Medina, 2009; Tokuhama-Espinosa, 2021). These two factors contribute to the variation in how the human brain operates or learns something (Barrett, 2017). In other words, each brain has followed "a unique trajectory based on its history, goals and practice" (Eagleman, 2020, p. 150). Therefore, the way learners approach a particular language tends to be coloured by how their brains have been wired based on their exposure to that language.

The second principle showcases the significance of prior experiences in the process of learning (Tokuhama-Espinosa, 2021). Its essence is underlined by David Eagleman, who claims that "early experience becomes foundational. It develops into the architecture upon which everything subsequent is built. Everything new is understood through the filter of the old" (2020, p. 140). Simply put, all new learning passes through the filter of previous experiences or "operational histories" of a particular learner (Lian & Sussex, 2018, p. 7). Learning is an act of meaning-making; the meaning of something to you is a web of associations based on your whole history of experiences. During the collision of old and new meanings, old meanings need to be challenged, refined, or even replaced so that learning can occur.

The third principle concerns the ability of the brain to structurally change in relation to input from the environment, which is described as neuroplasticity (Merzenich, 2013). Indeed, the human brain is malleable. This capacity declines with age but exists throughout the lifespan. Moreover, the adult brain remains plastic for both L1 and L2 (Steinhauer & Kasparian, 2020). This means that the more a person practices a new activity or a skill, the more proficient they can become at it. With extensive exposure or repetition, specific neural pathways are strengthened. Therefore, in the case of language learning, extensive, deliberate practice can lead to the achievement of fluency or the mastery of any language skill.

The fourth principle introduces the notion that our body and speech are synchronized during interactions (Tsuchiya et al., 2020). This harmonious organization of change between body motion and speech occurs in both intra-individual and inter-personal manners. People tend to coordinate and imitate in communication, which accounts for interactional synchrony (Dumas et al., 2010; Orsucci et al., 2013). In communicative settings, brain synchronization is discovered between interlocutors (Alejandro & Andoni, 2018). This phenomenon benefits social interactions in facilitating prediction, reducing cognitive load for smoother information flow and building up affective bonds (Hoehl et al., 2021).

The last principle is related to hemispheric asymmetries or the differences between the two regions of the human brain in terms of their specializations: the right hemisphere (RH) and the left hemisphere (LH). McGilchrist (2019) argues that regarding the nature of attention and processing input, the primacy of the RH should be highlighted. Specifically, according to McGilchrist (2019), the RH is responsible for attention globally while the LH dominance is for local attention. In other words, whatever we experience comes first in the RH. This idea also explains the priority of the RH, whose tendency is to deal with new experiences or learn new information that often causes apprehension. That is to say, new and unfamiliar input must first be present in the RH before it shifts to being the concern of the LH, once it becomes familiar (McGilchrist, 2019). This asymmetry or lateralization is also portraited in the operation of language. Though both hemispheres are involved in most tasks, these contributions from each may not be equal. Specifically, there is a dominance in the LH for most language processes, whereas the RH is more active in processing prosody and metaphor comprehension (Haegen & Cai, 2019). Despite this asymmetrical specialization between the two hemispheres, it should be borne in mind that this lateralization in all functions is not absolute. Still, both regions are involved in almost all mental processes; both constantly convey and transmit information in either direction several times a second (Haegen & Cai, 2019).

3.Understanding L2 listening through a neuroscience lens

According to Worthington and Bodie (2018), "although listening research has seen a resurgence in recent years, our understanding of key aspects of the listening process is woefully lacking" (p.11). Another reason is that the listening process is quite complex because it is individual and personal, involving cognitive activities, affective and behavioral components (Worthington & Bodie, 2018). Historically, listeners were viewed as passive processors or tape recorders; yet, later, there comes a realization that listeners are active searchers for meaning or even active model builders (Anderson & Lynch, 2003; Brown, 1997). As the latter view underlies the activeness of the listeners, it seems to have numerous advocators. For instance, Byrnes (1984) argues that during listening, learners are often inclined to focus on the word to construct meaning due to negative repercussions arising from having mastered their native language. On the contrary, Brown (1997) draws more attention to the impact of learners' background knowledge and their unique life experience. Likewise, Buck (2001) describes listening as an on-going process of constructing and modifying an interpretation of the incoming signal based on relevant information available at that time and emerging from their knowledge repertoires. Similarly, for Anderson and Lynch (2003), during listening, learners actively build their mental models to make sense of the signals. They postulate that listening is a process of building representations of auditory input as a result of combining new information with previous knowledge and experience in both linguistic and non-linguistic forms. Meanwhile, Rost (2016) highlights the integration of various types of processing: neurological, linguistic, semantic and pragmatic processing. He states that listening is an overlapping of these processes in a complementary manner.

It can be seen that these scholars all are on the same ground saying that listening is a process of constructing meaning. However, they differ in explaining how this meaning-making mechanism works. Most of them identify the presence of meaning, the contribution of prior knowledge and previous experience, the occurrence of an interaction between these mentioned factors. Only Rost (2016) presents a combination of processing types covering all facets, including a neurological perspective. However, he remains in the quest for identifying factors and putting them into categories. What makes the listening process through a neuroscience lens in the current paper distinguishable from these arguments is an acknowledgement of the existence of the unknown factors regardless of internal or external ones. The underlying reason is that if a history of an individual lifetime plays a crucial role in that person's learning process, as discussed in the first two principles, their meaning-making mechanism should be respected to maximize their learning. Therefore, when the unique characteristics are taken into account, an endeavour to seek certainty by diagnosing all factors seems not to be correct. Probably it may be helpful within the wall of classrooms, but in the long run, it may be ineffective in natural communicative settings, which are often filled with uncertain and unpredictable circumstances (Marton, 2015). In this case, the notion of operational histories showcases this dynamic feature (Lian & Sussex, 2018). Instead of listing the contributing external and internal factors in the listening process such as linguistic knowledge, background knowledge, prior knowledge, and experience, etc., the term operational histories highlight the activated elements that are supposed to be relevant online according to each learner's personal choice during the process of making sense of auditory input. Taken together, the author argues that listening comprehension is the process of constructing meaning as a result of the interaction between the auditory input and internal representations through the listener's perceptual filter or operational histories in a particular context. The three variables, namely internal representations, operational histories and context, are characterized as personalized, varied, inconstant, volatile and unknowable.

4. A brain-based technique for listening practice

In light of the alternative definition of listening comprehension above and the underlying assumption of principles 3, 4 and 5, the author proposes a listening technique that combines listening to filtered speech and normal speech in synchrony with body movements. This technique was created on the premise that it is possible to create optimal input as an awareness-raising activity to defeat the processing habits of L2 learners' brains (Cai et al., 2021). This can challenge these learners' reliance on the neural of their native language to learn and process L2 (Xie, 2018). Moreover, this input can trigger the right hemisphere before it is processed by the left hemisphere (Eagleman, 2020). In principle, learners have to listen to the filtered speech prior to the normal speech. A certain number of repetitions can be applied to each type of input depending on learners' proficiency level and the listening sources. They have to feel the melody with body movements. In the end, transcripts of normal speech are shown for self-check.

The filtered speech refers to the low-pass filtered utterance at a cutoff frequency of about 320

Hz. At this frequency, the prosodic features (stress, rhythm and intonation) are preserved, but the segmental elements (phonemic, semantic, and syntactic) are degraded (Luu et al., 2021). Studies in brain imaging have found that low-pass filtered speech can activate a number of areas in the right hemisphere strongly than normal speech (Fonseca et al., 2009; Ischebeck et al., 2008). This is because the unintelligibility of filtered speech effectively prevents learners from attempting to decipher the signal's original speech content. In this way, it bypasses learners' mechanism of processing information, which is dominated by the LH, in turn stimulating the RH effortlessly. In other words, when learners listen to filtered audio, this interferes with their well-established L1 listening habit, which tends to identify linguistic features. Under this circumstance, the prosodic features become more salient and more accessible during the listening process.

While listening, learners have to hum along with the melody (for filtered speech) or repeat the utterance (for normal speech) in coordination with their body movements. The underlying reason for this synchrony is explained by the link between body and speech in interactions discussed in principle 4. Learners can choose to move any part of their body (hand, fingers, legs, head, etc.) or even the whole body to feel the rhythm. By producing this kind of spontaneous beat movement, learners can sensitize and internalize the prosodic features maximally.

The technique can be implemented in both traditional and virtual classrooms or even beyond. With the capacity to filter the audio, teachers can build a data bank of listening resources in a particular teaching course. They can choose to play the recordings during the lesson as usual or to design an online platform embedded with filtered and normal speech for learners to practice listening by themselves. In view of the individualized nature of listening comprehension, a self-access listening course is recommended because it can offer learners a personalized, self-paced listening environment and promote their learning autonomy.

5. Conclusion

Overall, the paper set out to describe five principles concerning the human brain based on an extensive review of related findings in neuroscience and education. Accordingly, an alternative interpretation of listening comprehension and a listening technique are developed on the core assumption of the five principles. The paper has argued that understanding how the brain operates and how it processes input is essential for teachers to create an optimal learning environment that maximizes learners' listening performance. Specifically, considering the uniqueness of the human brain, the significance of prior experiences in constructing meanings, the brain's capacity to remold structurally, the synchrony between speech and body, and the functional differences between two brain hemispheres, the paper suggests implementing optimal input or filtered speech in coordination with normal speech and body movements in listening pedagogy. A description of a protocol for listening practice is also discussed in traditional or virtual classrooms as well as in online learning platforms.

This paper has gone some way towards enhancing our understanding of the human brain in the listening process and in language learning in general. It also provides some significant implications for educators and researchers. Specifically, given the enormous benefits of neuroscience knowledge, more workshop or training opportunities regarding this interdisciplinary view for undergraduates, graduates and teachers should be encouraged. By acknowledging the challenges and concerns in connecting two fields, educators need to make considerable attempts to translate the neuroscientific findings into the domain of education, specifically language teaching and learning. In this way, the information can be understood in the right way, and teachers can avoid misleading interpretations. Besides, teachers are advised not to make use of basic neuroscience findings and claim an educational application. Instead, investigation and experimentation are strongly recommended.

With the recent prevalence of online learning and teaching mode, there have been some attempts to find the appropriate approaches to teaching listening in the Vietnamese contexts (Ha & Ngo, 2021; Nguyen, 2021). Future research can be carried out to investigate the implementation of this brain-based listening technique in improving learners' listening comprehension in these virtual classrooms. This would be a fruitful area for further work.

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Biodata

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AsiaCALL Online Journal
ISSN 1936-9859; https://asiacall.info/acoj
Vol. 13, No. 1, 2022
pp. 82-92

Received: 31/10/2021
Revision: 22/11/2021
Accepted: 28/11/2021
Online: 30/11/2021

Utilizing Digital Resources To Foster Young Learners' Engagement In Online Learning Classrooms

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EOI: http://eoi.citefactor.org/10.11251/acoj.13.01.005

Abstract

Young Learners' engagement is a key factor in determining successful teaching and learning. Teachers have to differentiate their teaching approach in order to maximize students' motivation. Especially, many educators try harder to gain more students' engagement in online learning after the school closure affected by the COVID-19 pandemic. In order to stimulate students' motivation, teachers are required to deploy various digital resources on the Internet. However, teachers have been facing challenges in utilizing relevant and sufficient online materials to facilitate and engage learners in the learning process, which results in increasing learning productivity. Thus, this article aims to propose some practical teaching techniques using digital resources to foster engagement of young learners in online learning classrooms.

Keywords: online learning, students' engagement, digital resources

1. Introduction

According to B&Company Vietnam & BEAN Survey team (2020), by 20th April 2020, more than one billion students have been heavily affected by the COVID-19 outbreak. However, learning hasn't been disrupted by school closure thanks to online learning with the assistance of technology. Over the past two years, about 22 million students in Vietnam have attended online classes due to the pandemic outbreak. According to Duong (2021), 7.35 million students were reported to study online in September 2021, owing to the lockdown. Although both educators and learners have not much experience in teaching and learning online, they may be familiar with video learning that is totally different from teaching and learning online using a platform connected with the Internet. Moreover, some teachers and students refuse to participate in this procedure because they have not received much well-prepared training. It is obviously true that teachers will struggle to manage the students and engage them to learn through screens. Therefore, in this article, the authors are trying to bring some suggestions of utilizing digital resources to encourage learners to learn more effectively.

CITATION | Ho, T. M. L., & Nguyen, T. B. K. (2022). Utilizing Digital Resources To Foster Young Learners' Engagement In Online Learning Classrooms. *AsiaCALL Online Journal, 13*(1), 82-92. EOI: http://eoi.citefactor.org/10.11251/acoj.13.01.005

2. Literature review

2.1. Online Learning

Online learning and e-learning are used to describe distance education, but now they have become more popular terms to mention the teaching and learning process that happened through online platforms with the use of the Internet. According to Taylor (2001, p. 2), online learning has been known as a "fifth-generation" version of distance education which is "designed to capitalize on the features of the Internet and the Web." It means that education procedures are being taken place by instructors who facilitate students' learning with interactive elements, engage students with various activities that match students' learning styles, and encourage students to learn collaboratively and critically through a platform (Tapscott, 2009).

In fact, online learning is bringing a lot of benefits for learners and instructors in the way of its operations. It meets the demand of the greater student population and enhances students' digital skills. Moreover, students can learn anytime and *anywhere,* and they are able to interact with their classmates or teachers through virtual conferences or discussion forums. According to Cathy and Farah (2020), research has proven the effectiveness of online learning with access to the right technology. On average, about 25-60% more learning materials can be retained from learning online than traditional learning. Students also take less time to learn online than in a traditional classroom owing to self-paced learning based on their academic preferences and learning styles.

However, research shows that both teachers and students have been challenged with online learning regarding technical issues, improper training for online teaching, inappropriate online testing systems as well as lack of interaction and engagement (Cathy and Farah, 2020).

2.2. Young learners' engagement

Student engagement addresses problems regarding low achievement, less motivation, and high dropout rates (Shukor et al., 2014). In the light of other research, Dixson (2015) indicated student engagement is, generally, the extent to which students actively engage by thinking, talking, and interacting with the content of a course, the other students in the course, and the instructor. Student engagement is a key element in keeping students connected with the course and, thus, with their learning". To engage students in online learning, teachers should have their students be proactive participants, encourage them to collaborate with each other, and make learning fun. Technology in general and digital resources, in particular, are beneficial for increasing student engagement. Many e-learning resources have included e-learning platforms, applications, software, and websites that facilitate learning. However, the inability to deploy online resources or overusing various digital resources may result in the failure to engage students in virtual classrooms. Selecting and deploying suitable digital resources to increase student engagement requires digital knowledge, skills, and teaching experience.

Young learners are known as any students whose range of ages and developmental stages of children from infants, young children, and older children. One of the major characteristics of young learners is their short attention span which they may have full attention for about 10 to 15 minutes (McKay, 2006). That explains why students can only gain their learning from direct learning, real objects, interesting media, and visual aids (Harmer, 2007). Meanwhile, it is important for teachers to be aware that the mood of young children tends to change every other minute, and they are easily bored, but they are very active, curious, and willing to learn new things. Then, when teaching them, teachers are advised to use some expressive and purposeful media to increase their motivation (Brumfit et al., 2003). Moreover, Cameron (2001) also explains that the activities, media, and materials that the teachers provide for teaching young learners have to fit with students' interests rather than the teachers' interests. Similarly, Sukarno (2008) states that the media and activities should capture children's interest and curiosity. Hence, it is extremely prerequisite for educators to select, modify and rebuild resources, especially digital resources, in teaching online.

2.3. Digital resources

It is clear to see that students are interested in the material presented. They will engage and learn more. It means that learners will learn best only if teachers bring authentic and creative materials in the classroom, which play an important role in conveying the value and importance of the information. Especially in the virtual learning classroom, materials that teachers make on the Web are called digital resources. On the Internet, digital resources can be information that helps students widen their understanding, or they can be a procedure that teachers can use many different useful Internet tools to help learners study. Similarly, Shariful (2010, p.24) states that "Digital resources or digital information resources are those resources whose deal with both born-digital and digitized materials which can be either accessible from library's in house database or from the world-wide-web, in that case, materials must have to preserve the copyright law, for both the born-digital and digitized format, some resources will be permissible to furnish information in full text and others will be limited to metadata and some resources will be freely accessible for anyone from anywhere in the world and others will have limited accessibility due to the library's policy and for cost-related issues and also for the authentication.". In fact, Van et al. (2021) found that students achieved improvement in language skills, especially speaking skill (57%) and writing skill (31%) thanks to utilizing "educational apps, smartphones, Audio tools, Computer (75.30%, 60.80%, 19.40%, and 19.10% respectively)" (p. 38).

However, there are some considerations for teachers to pay more attention to using digital resources in their classes. First of all, when selecting digital resources and planning their use, teachers have already considered the lesson and learning objective, context, approach, learner styles, and learning environment. Secondly, it is clear that not all materials from the Internet are appropriate for every single type of class. As a result, instructors need to modify and construct the existing openly licensed resources to create or co-create new digital educational resources matched with lesson objectives as well as learner groups. Actually, many teachers are using the irrelevant resources that have already been made and shared by others and applying them to their classes. Consequently, it may bring back so many drawbacks that the learners wonder what they are doing. Lastly, with online learning, teachers should organize digital content and make it available to learners with the respect and correct application of privacy and copyright rules. That's the reason why teachers need to be aware of the importance of utilizing digital resources to foster young learners' engagement because of unlimited and uncontrollable resources from the Internet. The following session will suggest some practice Internet websites and tools that instructors can utilize to modify, create and recreate the digital resources for their young learners.

3. Recommendations

3.1 Classroom management

3.1.1 ClassDojo

ClassDojo (http://classdojo.com) is a popular tool and a free virtual classroom management web or mobile app that serves as a digital class folder. Teachers can submit students' portfolios to keep track of their characteristics or learning style as well as to create records of their behaviors during the class with multiple behavior categories (Rivera, 2019). It is not only good for teachers to follow students' learning progress with very effective functions such as general attendance checks, random names, or timers, but it is also great for students and parents to know how they are performing in the class.

Certainly, with the rewarding system, ClassDojo aims to maintain a positive learning

environment that encourages and reinforces the whole class or individual learners to perform desirable behaviors. It is also very personalized by allowing students to input and select behaviors that are worth it. As a result, it can shape learners' collaboration and engagement learning environment. More importantly, students are stimulated to work with groups to achieve particular goals that further enhance their academic performance in a positive way in the future.

3.1.2 Virtual badges

Virtual badges (https://badge.design/) is one of many websites to create virtual stickers, certificates, and badges, which are known as its heart, a student-centered strategy. It can help students see how to achieve a goal with a reward or how they try better next time to win those rewards that are parts of the learning process. Another advantage of getting virtual badges is to prove their accomplishment or skill achieved displayed online and share to everyone all over the world. This Internet tool helps instructors modify and design their own rewarding systems to match their learners' style or learning objectives. Obviously, it becomes a more achievable goal for students to work in groups or individuals to win the badges designed to their own values and styles.

3.2 Teaching vocabulary

According to Coady & Huckin (1997), vocabulary plays a crucial central role in language and critical importance to the typical language learner. Hornby (2004) also stated that a vocabulary is a total number of words in a language that is used by a person that helps learners to be able to understand and pick up the meaning of the conversation or the reading text. By learning vocabulary, the students can add many new words that have been known or unknown before and are used in their daily activities. In the normal class setting, teachers have to use many different techniques to teach vocabulary; for instance, using flashcards, drawing on the board, or real objects to present the vocabulary meaning and playing face to face games to practice the vocabulary.

However, using the appropriate and effective digital resources to teach vocabulary becomes more important in the digital world. It requires an instructor to present the vocabulary through the screen in an effective way that motivates them to learn and helps them get involved in learning. Using flashcards is one of many ways to teach vocabulary. According to Baleghizadeh & Ashoori (2011), a flashcard is cardboard consisting of a word, a sentence, or a simple picture. Now, teachers can create or recreate it with a digital flashcard their own flashcards using the Internet tools.

3.2.1 Cram.com

Cram.com (www.cram.com) is known as Flashcard Exchange, a web-based application for creating, studying and sharing flashcards. Teachers can create a set of flashcards by using pictures in the front and typing the text in the back. It is also great for learners to enhance their learning autonomy by adding voice or sound for vocabulary pronunciation. Moreover, the website also designs some gamified vocabulary activities from these sets of vocabulary flashcards that teachers have designed. Teachers can get students to play some memory games or matching games using these flashcards during the teaching procedure. Moreover, at home, students can do self-learning by making their own flashcards then challenging their friends to find which one set is the best. The last benefit of this Internet tool is its convenience which means instructors can use and reuse, edit, modify and share to anyone at any time and anywhere.

3.3 Teaching grammar

Grammar is one of the language aspects of teaching and learning the language. Its role in second language teaching is apparent. The grammatical devices of a language are necessary means to support learners to link all their ideas systematically to express meaning. Moreover, it requires teachers to understand a wide range of techniques to develop grammar teaching strategies to suit specific learner characteristics. In the end, it helps learners effectively apply their grammar understanding and knowledge in a communicative context, and it is also the main objective of teaching grammar. Therefore, as teaching online, teachers need to pay more attention to exploring and utilizing the digital resources to produce grammar worksheets and grammar games to make students practice grammar points to communicate in a context.

3.3.1 Board games – Tools for Educators

Board gameplay is an important role in teaching because it is a good activity for students to practice language, but it is also useful for them to work on social and cognitive skills.

While playing a board game, students have to participate, reinforce language contents, language aspects and language skills to play. According to the General Education Curriculum updated in 2019 by the Educational Department, board games are one of the main pillars of teaching in schools because they stimulate learners and provide context for them to generate language to use in situations (Casas, 2020). Meanwhile, Wright (2006) states that it is a great way for students to consistently practice their language skills using communication with other players participating in the board game.

The website called Tools for Educators (www.tools for educators.com) is to provides teachers with an excellent tool to personalize the Board Game with different aims for different lessons. All teachers need to do is to choose the "Board Game" function and submit the requests for students to complete. For instance, they have to make three different sentences using relative clauses, or they can have bonus points to move up a few spaces. The activity can be done in groups as competitive games and cooperative games, which emphasize winning or losing, but it makes the players try their best to work well with their teams to end up with the best results.

3.4 Teaching language skills

Fundamental language skills include receptive and productive skills that are also known as passive and active skills. Receptive skills defining a learner's ability to receive and understand the language input are reading and listening skills, whereas productive skills, including speaking and listening skills, enable learners to produce language by using speech or text (Sreena and Ilankumaran, 2018). Despite the categories, the four language skills are correlated and should be integrated to develop communication.

3.4.1 Teaching receptive skills

Receptive skills engage learners in reading and listening tasks. According to Saricoban (1999, as cited by Nomads, 2013), listening is defined as the ability to understand the speaker's accent, pronunciation, grammar, vocabulary, and comprehension of meaning. When teaching listening skills in virtual classrooms, teachers have been encountering challenges in properly maximizing technology for online teaching and making good preparation for suitable teaching materials (Susilowati, 2020). In order to overcome the difficulties of teaching listening online, Yılmaz and Yavuz (2015) suggest teaching phonetics by utilizing engaging listening activities and

examining similar sounds or pairs. Furthermore, learners should be provided with authentic language for practical input to speak with their friends, play digital games through listening lessons.

3.4.1.1 Teaching listening and reading

Reading is a significant skill that enables learners to understand a written text based on their vocabulary and background knowledge in the second language. In addition, reading enables learners to improve vocabulary, learn new ideas, and develop their knowledge (Constantinescu, 2007, as cited by Nomads, 2013). In the digital world, Pasaribu (2020) proposed that students can have access to reading materials and activities available online to choose their texts, adjust their reading time, strategies and monitor their progress thanks to self-assessment. One of the five ways to develop digital literacies for young learners that Castek et al. (2006) suggested is utilizing online stories on the Web. Online stories are engaging and interactive tools to get learners motivated with reading and enhance literacy skills.

With the purpose of developing receptive skills, this research recommends some digital resources, including online stories, videos, interactive listening, and reading games, to educators and learners. In light of the findings, Vega (2019) emphasizes the significance of teaching "concepts of print, phonemic awareness, and phonics" at a young age to build a basic foundation for reading skills.

3.4.1.2 Kiz phonics

Kiz phonics (https://www.kizphonics.com) is a website to help teachers focus more on practicing students' receptive skills. On the basis of a synthetic phonics approach, the Kiz Phonics curriculum offers a complete set of activities structured by levels for preschool, kindergarten, first, and second-grade learners. Using Kiz Phonics worksheets, phonics games, phonics flashcards, listening materials, word families' activities, phonics short stories, phonics lesson videos, and PowerPoint, young learners find joy in learning to read by combining letters to form sounds, reading unfamiliar words. This Kidz Phonics website facilitates teaching and learning Phonics as a beginning step of developing receptive skills by enabling educators and learners to select suitable phonics activities for all learning styles. Teachers can choose the levels and use resources to teach listening and reading at some teaching stages, including presentation and practice. Moreover, teachers don't need to make any preparations for lesson plans, PowerPoint Presentations, and worksheets, thanks to the available resources on the Kiz Phonics website. After using songs, stories for context setting, and PowerPoint for sound presentation, teachers can implement interactive games for young learners to practice engaging sounds and words. Finally, teachers can monitor their students with individual worksheets. Eventually, Kiz Phonics is an excellent progressive program to teach kids to read using a synthetic phonics approach.

3.4.2 Teaching productive skills

Productive skills - known as active skills, require language learners to transmit and produce information in either written or spoken form (Golkova and Hubackova, 2014). Scholars prove that productive skills and receptive skills are inseparable and unsuccessfully developed without integration. Furthermore, Golkova and Hubackova (2014) point out a mutual relationship of speaking and writing skills as well as engaging methods to develop productive skills with the assistance of technology. In fact, digital resources and competencies create opportunities for learners to increase their critical thinking, creativity, develop their communication, and "collaboratively build new knowledge" (Julie, 2014, p. 38).

3.4.2.1 Teaching speaking

Nomass (2013) defines speaking as communication requiring spoken language. Some scholars point out linguistic components that are essential for developing speaking skills based on accuracy and fluency. According to Negoescu et al. (2021), accuracy involves grammar, vocabulary, and pronunciation, whereas fluency refers to "the intonation, the speech rate, and the stress" (p. 162). Moreover, Nomass (2013) suggests using "Speech Synthesis Programs Modern computer programs" to "generate voice signals and decode human sound. These programs are defined as artificial intelligence computer programs and can be a useful tool for improving speaking capability. Practicing with such programs will strengthen vocabulary and pronunciation abilities as well" (p. 114). Eventually, based on Nguyen and Vo's (2021 p. 83) research, the result indicates the participants improved their language skills by using the English learning applications, including Elsa Speak, Duolingo, and BBC learning.

The researchers also point out significant benefits of maximizing the use of those apps in

language learning in terms of their features such as "free-option" and accessibility. However, educators have struggled with interacting with individual students for language checks to ensure speaking accuracy and fluency when teaching speaking online.

3.4.2.2 Speechace

For pronunciation check, accuracy, and fluency enhancement, Speechace is one of the best solutions. The speech act is designed to develop in-class speech recognition technology which aims to help learners develop their speaking skills. Their vision is to make practicing and improving speaking attainable without intensive one-on-one instruction, which allows learners to practice pronunciation. This browser is beneficial to students' reception of accurate pronunciation of sounds, words, phrases, and sentences and recording their voice by repeating the words or sentences. *Speech act* technology also gives feedback, which monitors learners' progress by checking their pronunciation mistakes, listening to the samples, and learning how to make accurate pronunciation. After the uploaded voice is checked automatically in a computerized process, learners are informed of the percentage of native-like pronunciation (Moxon, 2021). Additionally, this website supplies learners with speaking topics or pronunciations for a language review, which is appropriate for learning levels. With the support of technology, especially artificial intelligence, the function of speech recognition allows learners to record their voices and receive speech analysis in speaking activities graded by levels.

3.4.2.3 Teaching writing

According to Nomass (2013), the writing process is challenging to learners regarding brainstorming and organizing ideas by using grammar and vocabulary correctly. Similarly, Selvarasu et al. (2021) state teaching writing includes relating students' prior knowledge, using vocabulary, grammar, punctuation, and writing styles. In virtual writing classes, Selvarasu et al. (2021) advocate that virtual writing is ineffective due to a lack of monitoring, feedback giving, and peer assessment in the online class. As a result, language learners, specifically at a young age, are not engaged in writing activities or motivated to do their written work. The following parts are going to suggest some productive skill tools for teachers to engage students in virtual classrooms.

3.4.2.4 Book creator

Book Creator (https://bookcreator.com/) is a free website for everyone who wants to practice their writings skill to use. It is a convenient tool for teachers to improve students' writing skills. Teachers can easily assign writing tasks for students to write in the class or at home, and they can mark them later when students share their works. Moreover, in writing virtual classrooms, students are guided to create their own written work, including interactive comics, stories, digital portfolios, and publish online. Then, they are enabled to share their writing and read their friends' books. This website also allows users to insert images, audio, and video that can enhance their creative skills to make interactive stories or books. That's the reason why *Book creator* is a good tool for teachers to facilitate language reinforcement in a fun and engaging way.

4. Conclusion

In conclusion, the Internet benefits to the teaching and learning process are undeniable. Especially when education is switched from offline to online in the pandemic time, it becomes more vital to retain students' engagement in their learning through screens. In this study, the authors have stressed the need to leverage and utilize digital resources, which is tremendously beneficial to students if teachers devote more time to selecting, modifying, producing, and recreating the relevant digital supplements. With the good strategy using effective digital resources, teachers deliver their lesson livelily and boost students' engagement through screen effectively.

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AsiaCALL Online Journal
ISSN 1936-9859; https://asiacall.info/acoj
Vol. 13, No. 1, 2022
pp. 93-121

Received: 15/10/2021
Revision: 22/11/2021
Accepted: 05/12/2021
Online: 06/12/2021

Improving EFL Students' Intonation In-Text Using Shadowing Technique with the Implementation of Google Text-to-Speech

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EOI: http://eoi.citefactor.org/10.11251/acoj.13.01.006

Abstract

Intonation, a feature of pronunciation that embarks on how an utterance is produced with respect to the notion of accent, stress and the rising/falling pitch, has always been considered troublesome to second language learners due to its connection to personal emotion. Recently, greater attention has been drawn from academia to the investigation of the potential solution. In contribution to the existing research, this paper is to shed light on the impact of shadowing technique with the aid of spoken text features by Google Text-to-Speech on removing learner's flat tone as well as achieving basic English intonation in text, provided that the tool is adopted intensively throughout a pre-designed training course. In the study, a pretest-posttest method is employed in one same sample, with the pre-scheduled experimental period being the control group and post-training being the treatment group. After ten weeks of intensive training program following a detailed syllabus, the posttest results, which are computerized using Speech Analyzer, indicates that the participants benefit from the training in terms of intonation in the text as there is a positive difference in scores achieved by the treatment group, benchmarked against the control group. However, due to the rather small size of the population, the study failed to generalize its findings. The implementation of spoken texts in Google Text-to-Speech tool and Speech Analyzer software will be further discussed in this study.

Keywords: Intonation in text, default tone, Google Text-to-Speech, text-to-speech, shadowing techniques

1. Introduction

It is indisputable that the English language has become a lingua franca with globally widespread use. The demands for language learners, thus, have increased accordingly. Besides mastering grammatical structures and patterns as well as conquering a wide range of lexical items, learners are now required to learn how to use a language in their own way. Together with other features of the English language that form productive competence like speaking, intonation starts to be considered personal prominence. Assuredly, intonation is deemed one of the most crucial attributes a child perceives at the beginning of his first language (Cruttenden, 1997; Crystal, 1986; Lieberman, 1986; Mehler *et al.*, 1988; Snow & Balog, 2002). Unlike Vietnamese, Mandarin, Thai or Japanese, which deal with prosodic characteristics of lexical tones, the

CITATION | Le, P. N., Vu, H. M. L., & Tran, M. N. (2022). Improving EFL Students' Intonation in Text Using Shadowing Technique with the Implementation of Google Text-to-Speech. *AsiaCALL Online Journal*, 13(1), 93-121. EOI: http://eoi.citefactor.org/10.11251/acoj.13.01.006

English language uses tone partly as a medium of intonation to convey information. In terms of English language use, the tonal choices of individual words or sentences do not alter the lexical meaning of sentences but their non-lexical meaning (Wells, 2006). As a matter of fact, the English intonation system poses a number of complicated issues to its users, yet it plays a pivotal role in the language's prosody. For other branches of pronunciation, such as phonetically pronouncing an individual sound or word, the drill method, which requires students to say the words aloud repeatedly, seems effective. However, it is virtually unreasonable to expect that the ability to intone properly can be shaped using a similar approach, for intonation involves the speaker's feeling at the moment the utterance is produced.

Recently, prosodic characteristics of intonation have drawn great attention from academia to look for possible solutions to the problem mentioned above. In contribution to the existing research, this paper is to shed light on the impact of shadowing technique with the aid of spoken text features by Google Translation tool, particularly Google Text-to-Speech, on removing learners' inappropriate use of English intonation, provided that the tool is adopted intensively throughout a pre-designed training course. In the study, a pretest-posttest method is employed in one same sample, with the pre-scheduled experimental period being the control group and post-training being the treatment group. After six weeks of intensive training program following a detailed syllabus, the posttest results, which are computerized using Speech Analyzer, indicates that the participants benefit from the training in terms of intonation in the text as there is a positive difference in scores achieved by the treatment group, benchmarked against the control group. Besides, the implementation of spoken texts in Google Translation tool and Speech Analyzer software will be further discussed in this study.

2. Literature review

2.1. Defining key terms:

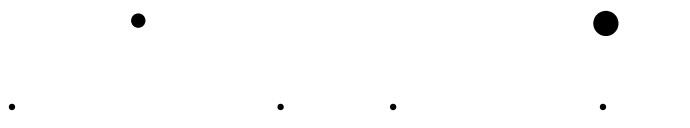
2.1.1. intonation:

In this paper, intonation is strikingly marked as the rhythm of speech that effectively supports the organization and transmission of messages. It is also one of the most broadly used aspects of suprasegmental phenomena which has a huge impact on verbal languages - notably the English language system. Intonation carries not only grammatical concepts but also syntactic and pragmatic meanings. With that being said, it is reasonable to state that language learners who made greater efforts in learning and exploiting intonation in their learning have higher proficiency in English (Wennerstorm, 1998). Aside from learning how to master the incredibly precise pronunciation of discrete words or sentences, learners' awareness and concerns about other prosodic features such as intonation should receive more attention from those in charge of L2 teaching and training. As a matter of fact, it would be much better if the students themselves were provided with proper intonation training. In Lin, Fan, and Chen's views (1995), English learners tend to pay greater attention to pronunciation or lexical items such as vocabulary and grammatical structures than intonation and rhythm when listening to English. This explains why most of them struggle to catch up with the speed of the listening tapes. According to Gilbert (1994), tone and its features enable learners to follow the flow of information in spoken English. For Piekering (2004) and Wennerstomi (2004; 1998), a non-native speaker’s English will be deemed more comprehensible by receivers if the user can employ proper intonation structures.

Mainly, English language intonation is generally classified into three systems of hierarchy: tonality, tonicity and tone (3Ts) (Wells, 2006). Respectively, tonality can be referred to as the position at which speakers choose to cut their utterances into chunks. Appropriate intonation patterns should be applied to each chunk. Those chunks are widely known under the names like the intonation of word group, tone group or intonation phrases - so-called IPs. Considered the next hierarchical matter, tonicity is a term showing that language users highlight the most crucial words they desire to express (Wells, 2006). These accented words are expected to receive much attention from the hearers. More often than not, the speakers accent the main stressed syllable of the word to be more accurate. At the time, they shift the pitch movement by rising from low to high tones. This is to say, the last matter in 3Ts happens to be born - tone. Particularly, the last and the most important accent in IP is called the nucleus. The tone is defined and decided when the speaker locates the nucleus in terms of pitch. The tone of sentences is closely associated with the type of pitch movement placed.

Basically, the most fundamental distinctions of nucleus tones are falling, rising, and falling-rising tones. In this study, the three tones are again generalized into falls and non-fall since falling tones, and their variations are varied and rather vague (Wells, 2006). In falling-toned sentences, the tails fall lower than its nucleus and rising-toned sentences with that in vice versa.

(fall) I think it was funny.



Nucleus|tail

(rise) Was it funny?

Nucleus|tail

In the two examples, the syllables *-fun-* are treated as the nucleuses which are accented strongly with appropriate timing, and the syllables *-ny-* are tails. The tail in *(fall)* examples goes lower than its nucleus compared to that of *(rise)* example. Therefore, *(fall)* example is determined as falling tone and *(rise)* example is defined as rising tone. In this paper, the research team principally pays huge attention to default tones that are relatively associated with the notion of tones regarding each type of sentence. Our target participants are non-English majors who have loose English backgrounds and no attachment to the language. As generalized, default tones can be:

- a fall as in sentence types such as statements, commands and wh-questions, exclamations;

- a rise as in questions requiring confirmation such as yes-no questions;

Apart from that, another generalization of default tones involves the notions of utterances. The default can be:

- a fall if it displays the main part of the utterance, and
- a fall-rise/rise (non-fall) if it displays a subordinate or dependent clause.

2.1.2. Google Text-to-Speech (GTTS)

Google Text-to-Speech (GTTS) with WaveNet occurred as a momentous development of speech synthesis technology.

Google Text-to-Speech (GTTS) is an application of screen reader used for the Android operating system, powered by Google. It enables apps to read out loud the texts appearing on the screen in a variety of languages. Apps such as Google Play Books for using machined voices to read books aloud, Google Translate for voicing out loud translations with precise pronunciation and human-like intonation, and many other applications which command ascended Artificial Intelligence (AI) technologies.

WaveNet, a software developed by Google's UK-based AI firm DeepMind, belonging to Google since 2014 due to Google's acquisition, generates Google Cloud Text-to-Speech. The system makes an effort to set itself apart from Amazon and Microsoft. DeepMind's AI speech synthesis technology is notable for its realistically sophisticated naturalness. Concatenative synthesis is used by most speech synthesizers (including one of the most powerful AI apps - Apple's Siri), where a program saves individual phonemes and subsequently puts them together to produce words, phrases, or sentences. WaveNet, on the other hand, generates speech via machine learning. It then reconstructs waveforms from a database of the human voice with a rate of up to 24,000 samples a second. Google Text-to-Speech has successfully exploited new technology - speech synthesis- to the full.

A variety of voices and languages supports GTTS.

GTTS is provided with a wide range of voices, including both standard and WaveNet voices. WaveNet voices, specifically, are examined for higher quality voices.

Language	Voice type	Language code	Voice name	SSML Gender	Sample
Afrikaans (South Africa)	Standard	af-ZA	af-ZA-Standard-A	FEMALE	0:00
Arabic	Standard	ar-XA	ar-XA-Standard-A	FEMALE	0:00
Arabic	Standard	ar-XA	ar-XA-Standard-B	MALE	0:00
Arabic	Standard	ar-XA	ar-XA-Standard-C	MALE	0:00
Arabic	Standard	ar-XA	ar-XA-Standard-D	FEMALE	0:00
Arabic	WaveNet	ar-XA	ar-XA-Wavenet-A	FEMALE	0:00
Arabic	WaveNet	ar-XA	ar-XA-Wavenet-B	MALE	0:00

Particularly, WaveNet voice implemented in Google Translate - Google Text-to-Speech is coded:

Language	**Voice type**	**Language code**	**Voice name**	**SSML Gender**
English (US)	WaveNet	en-US	en-US-Wavenet-G	FEMALE

GTTS is believed to be the highest achiever on the Mean Opinion Score (MOS) scale.

This bar chart below indicates that WaveNet voices in US English and Mandarin Chinese are significantly more outweighed compared to other synthetic voices and human speech. The y-axis values show raters' Mean Opinion Score (MOS). On a scale of 1 to 5, test raters evaluated each voice based on how much it was almost like natural human talk. (Google, 2013)

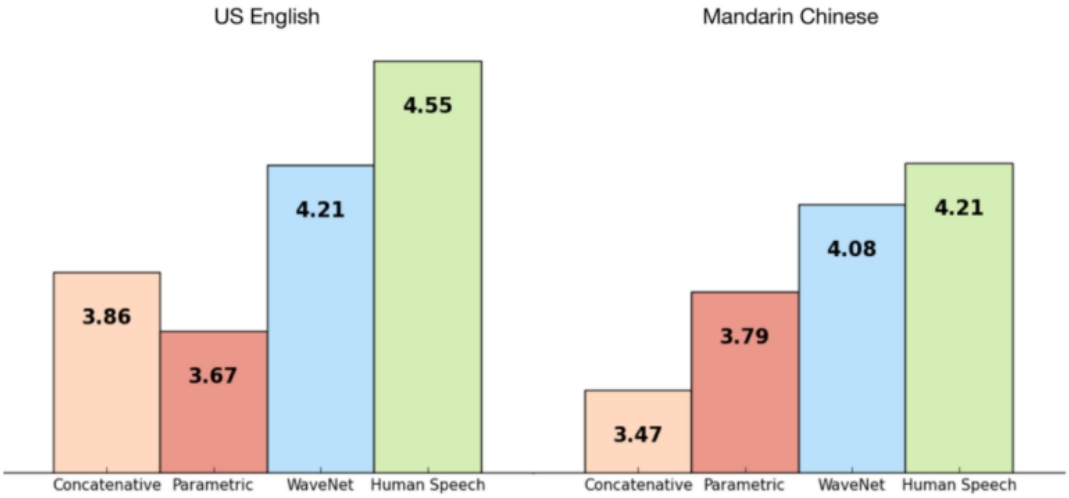


Figure 1. Comparison between US English and Mandarin Chinese using WaveNet voices, other speech synthesis and human speech.

WaveNet produces more natural-sounding voices than previous text-to-speech model systems. Its synthesized voices are based upon levels of phonemes, syllables, and words which shadow human-like emphasis and inflection. In 2016, Oord, Dieleman, Zen, Simonyan, Vinyals, Graves., ... & Kavukcuoglu, K. proved the effectiveness and the degree of naturalness of WaveNet voices via their paper. The researchers conducted three experiments in total, including Multi-Speaker Speech Generation (MSSG), Text-to-Speech (TTS), and Music (M) in order to give clear evidence and significant statistics. Among others, it is rather obvious to view from *Table 1* that TTS from WaveNet occurred to be greater outperformed the two models which were first from Gonzalvo et al. (2016) - hidden Markov model (HMM) and the other was from Zen et al. (2016) - long short-term memory recurrent neural network (LSTM-RNN). WaveNet voices reached *4.21* for North American English and *4.08* for Mandarin Chinese on the 5-point MOS scale for its naturalness, which proved the undeniable significance. They were considered the surprisingly highest point ever achieved. WaveNet considerably improved the prior state of the art, narrowing down the distance between human-like speech and the best previous synthesized speech model by up to 50%.

Table 1 *The MOS test results are shown from the test.*

	Subjective 5-scale MOS in naturalness	
Speech samples	North American English	Mandarin Chinese
LSTM-RNN parametric	3.67 ± 0.098	3.79 ± 0.084
HMM-driven concatenative	3.86 ± 0.137	3.47 ± 0.108
WaveNet (L+F)	$\mathbf{4.21} \pm 0.081$	$\mathbf{4.08} \pm 0.085$
Natural (8-bit μ-law)	4.46 ± 0.067	4.25 ± 0.082
Natural (16-bit linear PCM)	4.55 ± 0.075	4.21 ± 0.071

2.1.3. Shadow-reading technique

Intonation should be substantially put into consideration to teach at the discourse genres, according to Levis (2002; 2004) and Jenkins (2004). Shadowing, along with mirroring,

repetition, and imitation approaches (Goodwin 2004), is one of the most effective oral teaching methodologies applied for copying intonation of native speakers, according to Celce-Murcia et al. (1996). In practical application, the shadowing technique is commonly employed in Simultaneous Interpretation training (SI). Before starting SI training sections, the participants must engage in extensive shadowing practices to grasp the rhythm Shadowing Technique in English Intonation Instruction and prosodic elements in actual speech. The fundamental skill set of shadowing is to closely follow the utterances of Native Speakers (NSs) (Luo, Yamauchi & Minematsu, 2010).

In this paper, a pedagogical method called shadow-reading technique, adapted from Murphey's (2001a) - deemed to be 'conversational shadowing', predominantly became our central instruction. The pedagogical method helps to strike into a complicated yet customary phenomenon in discourse matters regarding people's silent or aloud repetition of what they hear from their interlocutors. Shadowing, from 1992, has been identified as an effective tool for training interpreters (Kurz, 1992; Sabatini, 2000) and for assessing skills in the language process, particularly for listening and reading skills, to majority scholars (Kurz, 1992; Sabatini, 2000). (Gray, 1975; Jordan, 1988; Marslen-Wilson, 1975; Muchisky, 1983).

Murphey (2001a) advocated for the use of conversational shadowing in classroom research, a practice in which students not only repeat, partially or totally, what other students say but also respond dialogically. Summarizing as a means of shadowing lengthy spans of conversation is also recommended by Murphey (2001a). Therefore, there are two formations of shadowing: shadowing and summarizing. According to Murphey (1996, 2001a), Shadowing may be useful in demonstrating to learners how to make negotiations in a way that facilitates L2. As indicated by Gal'perin (1969) approach to the development of mental processes, interactive shadowing and summarizing appear to be excellent for external (audio) verbalization. Shadowing and summarizing have been demonstrated to be useful in boosting L2 learners' listening and speaking abilities in empirical studies (Tabata, 2002; Tamai, 2001). With that being said, shadowing itself became our exclusive method option to implement in our online training. Vygotsky's (1986) idea of imitation has been shown to be in agreement with James M. Baldwin's (Lantolf & Thorne, 2006), particularly the form of imitation he called persistent imitation. Simple imitation, which Baldwin (1894, 1895/1906) defined as an involuntary, results in a more or less close copy of the original and does not involve consciousness of what has been done, and persistent imitation, on the other hand, is a type of purposeful, intentionally cognitive activity that involves making multiple tries to duplicate a model, each time in an attempt to improve the reproduction using an image of the original model and the imitator's past attempts as a guide. Therefore, persistent imitation is more cyclically, purposefully transformative in nature and optioned as a more narrowed scope of the study.

It is apparent that imitation does not imply mindless mimicry or repetition. Imitation entails recognizing the means to achieve the activity's goal (end, purpose, or result) and understanding the objective's aim (end, purpose, or result). Linguistic imitation, in particular, necessitates both awareness of the communication goals and the tendency to generate language. Rather, it is the endeavor of children to recreate the language that adults produce with the same communication function, according to Tomasello (2002). Two important factors govern linguistic imitation: entrenchment and pre-emption (Tomasello, 2003). Learners get habituated to producing language solely in ways that are comparable to those generated by professional speakers around

them through entrenchment, which is achieved by frequent exposure to linguistic models and successful use.

2.2. Previous studies

There is increasing demand in learning global languages in this interconnected world, and English has long taken the lead amongst other languages. Language, by far, is one of the primary factors that function as a bridge to bring worldwide nations closer, which means a great deal in terms of both economic and social aspects (Tran & Nguyen, 2018, as cited in Luu et al., 2021). As far as language acquisition is concerned, EFL learners are expected to master all four skills to be verified as proficient language users. Henceforth, the standardized English language syllabus used in Vietnam has long been dominated by the teaching of grammar and reading comprehension while the speaking skill was hardly paid any attention to, which resulted in learners not being able to communicate in a real-time context properly. Pronunciation and intonation were therefore also excluded as part of the national syllabus for the foreign language program for ages before they started to captivate attention from Vietnamese researchers and educators roughly two decades ago. Since then, with the advancement of technologies, and recently, the outbreak of the Covid-19 pandemic, learners all over the world have been subjected to virtual learning. Though met with a barrage of criticism, online learning, assisted by up-to-date media, presents a "*strong potential to enhance language skills for learners and promote the process of learning English*" (2021, Van et al., as cited in Pham, 2021), and a vast variety of research into this particular area has got an opportunity to expand further.

In 2011, Ngo published a study featuring adopting an intonation teaching approach that involved individual language learning strategies (LLS). The training model allowed learners to decide on the strategy that best suited them, and it was shown to work well in combination with other teaching and learning techniques employed throughout the training course, such as written reports, field notes, group discussions and interviews. As a result, the study generally revealed improvement in the ability of Vietnamese learners of English to perceive two features of English intonation: tonicity and tone after the training course. Within the same year, Tran (2011) also suggested that the teaching of intonation in which students are entitled to experiencing real English rhythmic patterns and melody yielded a better result on students' performance of intonation compared to those who were only provided with theoretical knowledge concerning intonation. Most of these studies, despite particular differences in their approaches, revealed a positive outcome for certain implications on teaching and acquiring pronunciation/ intonation. Students' interest was successfully aroused as they were allowed to have a more hands-on experience in their training and really get engaged in the world of melody with diverse prosodic features, which proves absolutely crucial in any pronunciation training. However, regardless of the observable merits, it goes without saying that those teaching methods not only take a large amount of time but also demand close monitoring of the trainer. Thus, whether it would present a mismatch between what the research team thinks is possible and what can actually be achieved after an intonation training course remains questionable.

Studies on shadowing technique & intonation

In the era of the Audio-Lingual method, shadowing was considered one of the most relevant techniques to use in teaching speaking and listening, and so far, it still proves to be an effective tool in pronunciation training (Лобачова, 2020). In fact, practically speaking, of all the techniques prevalently implemented in intonation training, shadowing is gaining greater

support than ever and contributing considerably to the second language teaching as well as acquisition. However, it is rather surprising that back in the early 2000s, little research could be observed on the implementation of shadowing in teaching speaking, with pronunciation and intonation included (Hamada, 2018). Despite its own failure to maintain researchers' interest over the last two decades, shadowing technique is currently intensively delved into and manifests itself in an abundance of research schemes into the field of intonation training worldwide. Up to the present, most of the works aiming at measuring the effectiveness of teaching experiments using shadowing technique have revealed a positive impact on students' performance in receptive and productive skills such as listening, speaking and reading (Hamada, 2016; Nakanishi & Ueda, 2011; Hsieh, Dong, & Wang, 2013). The prosperity of research into the importance of shadowing for English language teaching is rather obvious, but then, there are few studies that examine the influence of this particular technique on pronunciation in general and intonation to be more specific. In addition, despite the fact that different training approaches were taken into detailed consideration and all proved fruitful to some extent, they tend to involve great effort and require teachers to have a profound understanding of prosodic features and intonation-related concepts. Nonetheless, it is not ideal in Vietnam, especially when most teachers lack the confidence to conduct pronunciation/intonation lessons.

2.3. The current study

The teaching of intonation has been neglected for a long time for numerous reasons (Ngo, 2011). Research by Graham & Post (2018) suggested that together with other aspects, the L2 competency of a second language learner was also represented in the way they deal with intonation while speaking. However, in spite of its importance, there has been no course devoted to teaching intonation at any language institutions in Vietnam, along with the fact that the amount of time allocated for teaching intonation in the course syllabus is not specified, and even if any, the amount remains minimal and often skipped by the teachers as intonation training section is, more often than not, considered optional. This is true for all levels of public education in Vietnam, from primary schools to tertiary institutions, and the significance of intonation training seems to be overlooked at present time though several reformations regarding second language teaching have already taken place throughout the course of history. As intonation is not presented as part of the national syllabus of English subjects, it is not legally included in any kinds of testing or assessment of English language proficiency issued by the Vietnamese Ministry of Education and Training. This necessarily presents an urge to rethink the problem, raising teachers' awareness of the fact that intonation training should not be undervalued under any circumstances and coming up with in-time strategies to compensate for the ever-gloomy scenario of intonation teaching in Vietnam.

The lack of research into intonation training that takes into account the Vietnamese educational settings could be attributed to numerous factors, among which stands out two significant ones that, as the research team believes, can be properly addressed within the scope of this study. First, the lack of confidence and understanding of intonation amongst Vietnamese teachers of English remains quite a prevalent issue (Ngo & Setter, 2011). Second, intonation, like other language areas, requires learners to have constant exposure to it by listening to modal recordings as well as practicing using appropriate intonation on a regular basis in order to be familiarized with intonation. Also, assessing students’ progress in their performance can even present itself as a major concern for those in charge of teaching intonation. The question pops up right here: in a circumstance in which intonation training is generally undervalued,

represented by the fact that no course has ever been specifically designed for reinforcing students' perception of intonation, and economic factors constantly prevent a large number of Vietnamese learners from accessing proper training, what should be done to address the problem? At this point, it is worth remembering that the world has entered the greatest digital reformation, and the options for any kind of learning should be numerous. Zeitoun (2008, as cited in Nguyen, 2021), classified online learning into two different types: *synchronous* and *asynchronous* mode. The former is typically conducted via a video-conferencing room, which allows learners to interact intensively with their instructors and receive different kinds of feedback, either impromptu or official, while the latter offers students access to a wide range of sources with already prepared lessons, and they can keep track of their own learning pace. Regarding intonation training, the advent of applications assisting the acquisition of pronunciation, ELSA speak, Voki, and Puppet Pals, to name but a few, has proved its great contribution to improving the situation (Samad and Ismail, 2020). However, most of them are not free of charge or have a free basic version which merely provides learners with limited access to their features and resources. By now, the option should be clear – the research team is seeking a tool or website assisting intonation practice that (1) possesses a wide range of resources of oral records and database to serve the purposes, (2) fully requires little competency from the teachers and (3), most importantly, easily accessed with permanent free of charge policy. After researching intensively, GTTS seemed to be a potential candidate and was taken into account as the primary tool adopted in this experimental study. Specifically, GTTS operates on a massive volume of worldwide language data, with prosody information (i.e., rhythm and melody) included, and the voice assistant embedded in the website is totally eligible for a pronunciation/intonation learning tool. Besides, GTTS, which is embedded within Google Translate, is a cost-free and readily available service, with a new model introduced recently that enables users to use the app everywhere, no matter whether there is an internet connection or not ("About - Google Translate", 2017). These features make GTTS a preferred tool for our intonation training scheme. Basically, the study aims at measuring the effects of the shadowing technique aided by GTTS on EFL students' performance of intonation in-text throughout a pre-designed training course.

2.4. Research questions

The aims of this study can be addressed through the following research questions:

1. Do the students use default intonation in text correctly before the online training course?
2. To what extent do the students improve their performance of default intonation in text after the online training course?

3. Methods

3.1. Pedagogical setting and participants

The participants in the study were university students ranging from first to the third year who have little to no knowledge of English intonation in text. At the time of the research, these students were studying at two universities in Ho Chi Minh City (abbreviated to HCMC), Vietnam, namely the HCMC University of Technology and the HCMC University of Education. Both convenience sampling and snowball sampling were employed for the distribution of the questionnaire. First, the research team posted an online questionnaire via

Google Forms on the Facebook pages of the two universities mentioned previously, which received a total of 172 responses. The respondents, then, were kindly requested to invite their classmates and friends to fill in the form. Hence a snowball sampling started, which gathered ten more participants in the process. The responses were then checked manually to opt out of those who had more competency in English intonation needed for the study. In total, 18 valid responses were recorded. Due to the adversity of the raging Covid-19 pandemic, the size of the participants was then shrunk to only 7. This represented a great difficulty for the research team in finding a sufficient number of available participants to take part in the online training course. Despite the very limited sample given, the research team believes that this study's findings should provide a starting point for further in-depth research on the same area of interest.

3.2. Design of the study

The study was conducted using both quantitative and qualitative components. A pretest/posttest design was used to measure the effects of a 10-week online training course (ten 90-minute sessions on the Zoom online meeting platform) on English default intonation. The online course only took place in only 10 weeks since it occurred during the start of the participants' new school year. Periods longer than 10 weeks would have been problematic for the participants' schedules. The course syllabus mainly focused on the default intonation of five types of sentences, namely *Statement*, *Exclamation*, *Yes-no question*, *Wh-question*, and *Tag question*. Although the course included all types of default intonation in text, the research team only elaborated on falling and rising intonation as the study's aim. The course allowed the saving of the audio files, which facilitated the contrast between the prosodic patterns produced by the participants and that of the spoken texts provided by GTTS. These files were then analyzed using Speech Analyzer software to provide auditory and visual displays of pitch contours as feedback and assessment. The software, hence, served as a tool for the interpretation of the study's findings. The training course syllabus followed a framework of shadowing instruction and structured input activities (Wells, 2006) in combination with GTTS. The input activities focused on helping the participants to recognize and reproduce some important patterns of English default intonation in text. The course also included explicit information about the patterns and their meaning in terms of text and basic conversation (Wells, 2006).

3.3. Data collection and analysis

The pretest (see Appendix 1) consisted of the first recording of the participants' short sentences prior to receiving any target knowledge of English default intonation in text. The test required the students to create separate recordings of 6 sentences, including 2 *statements*, 1 *exclamation*, 1 *yes-no question*, 1 *wh-question*, and 1 *tag question*. The results taken from the pretest will facilitate the course syllabus as they will provide the research team with a preliminary assessment of the participants' appropriate use of English default intonation in text. The researcher compiled notes on the sessions and the learners' comments and reactions during the training course. The participants' progress was also recorded for analysis and feedback throughout the course. At the end of the online training course, the posttest consisted of the participants' perception of default intonation in the text as well as the last version of short sentences produced and recorded by them. In terms of the recording questions, the students were asked to create separate recordings of 9 sentences, including 2 *statements*, 1 *exclamation*, 3 *yes-no questions*, 1 *wh-question*, and 2 *tag questions*. Each participant completed an anonymous questionnaire on the value of the online intonation training course received within the post-test.

Finally, using the Speech Analyzer software, each of the participants' recordings in the posttest was assessed by comparing their prosodic patterns with those produced by GTTS. Each of the recordings was assessed by the three members of the research team to make sure that the assessment was done coherently and appropriately. Then, each member gave their own comments on the degree of intelligibility of the participants' prosodic performance. After that, the research team provided feedback for the participants' performance.

4. Results, Findings and discussion

4.1. Results and interpretation

As previously mentioned, participants were asked to do a pre-designed test on their ability to use proper intonation for different types of English sentences prior to the training course. It is rather surprising to observe that the students managed to use appropriate falling intonation while the rising tone seemed to pose a real challenge to their perception (1).

After the training course, students' performance in intonation was assessed via another test whose results then, indicated an improvement in rising intonation. By contrast, it is noticed that their use of falling tone hardly improved. This trend can be presented in the charts as below:

STATEMENT (FALLING INTONATION AS DEFAULT)

Table 4.1 Frequency description of students' pretest default falling intonation performance using Speech Analyzer

PRETEST				
Sentence	**Name**	**Nucleus (Hz)**	**Tail (Hz)**	**Percentage (%)**
1. I **don't** think it is true that she was a**fraid**.	Student A	287	211	73.52
	Student B	307	254	82.74
	Student C	118.7	105.9	89.22
	Student D	140.9	66.1	46.91
	Student E	419	243	58.00
	Student F	136	120	88.24
	Student G	294	184	62.59
	Google	296	113.4	38.31

Table 4.2 Frequency description of students' posttest default falling intonation performance using Speech Analyzer

POSTTEST				
Sentence	**Name**	**Nucleus (Hz)**	**Tail (Hz)**	**Percentage (%)**
5. I be**lieve** it is going to rain at the end of the **week**.	Student A	271	210	77.49
	Student B	246	195	79.27
	Student C	139.7	119.8	85.76
	Student D	137.8	122.8	89.11
	Student E	294	214	72.79
	Student F	375	68.8	18.35
	Student G	280	176	62.86
	Google	297	122.8	41.35

The tail movement percentage illustrates whether the sentence is uttered with falling or rising intonation. A value below 100% points to a fall in intonation, while one exceeding 100% indicates a rise in the speaker's speech.

The table is intended to record the figures for *statements*. Obviously, tail movement percentage values generated by the speech of all students manifest themselves below 100%, so all those taking the test used proper falling intonation for this sentence type in both pretest and posttest. That means the learners generally did not struggle with the falling intonation, and there is also no significant improvement in learners' perception of this prosodic feature.

YES-NO QUESTIONS (RISING INTONATION AS DEFAULT)

Table 4.3 Frequency description of students' pretest default rising intonation performance using Speech Analyzer

PRETEST				
Sentence	**Name**	**Nucleus (Hz)**	**Tail (Hz)**	**Percentage (%)**
2. Is it true that you **faked** your way in **here**?	Student A	344	283	82.27
	Student B	357	287	80.39
	Student C	111	106.4	95.86
	Student D	64.9	229	352.85
	Student E	247	457	185.02
	Student F	160	139	86.88
	Student G	406	234	57.64
	Google	237	286	120.68

Table 4.4 Frequency description of students' posttest default rising intonation performance using Speech Analyzer

POSTTEST				
Sentence	**Name**	**Nucleus (Hz)**	**Tail (Hz)**	**Percentage (%)**
1. Are **you** seri**ous**?	Student A	331	355	107.25
	Student B	246	260	105.69
	Student C	129.9	231	177.83
	Student D	127.8	227	177.62
	Student E	237	376	158.65
	Student F	146.9	185	125.94
	Student G	227	228	100.44
	Google	267	287	107.49

The research team attempted to calculate the variation percentage concerning Yes-No questions brought about by both the pretest and the posttest. According to Wells (2006), the default intonation of Yes-No question is a rise.

As to the pretest, most figures are below 100%, which points to a fall in the participants' speech. This is deemed inappropriate as the participants were required to record the yes-no question given using proper default intonation, i.e., a rise. Meanwhile, the above-100% percentages shown in the posttest suggest that the learners successfully used the correct rising intonation as default.

At this point, it would be better to delve into the dilemma in greater depth. The fact that learners barely improve their intonation when it comes to a fall can be attributed to two main reasons. First, Vietnamese intonation does not embed and operate on semantic meaning but lexical meaning, which features the rise or fall based merely on the tonal systems with the combination of 6 fundamental tones. That should explain why Vietnamese do not have a tendency to lower their tone when asserting discourse-level definiteness and certainty. Secondly, according to Wichmann (2014), when learners are trained properly and their awareness is deliberately activated, they tend to improve rising more than falling intonation. Theoretically, the rising tone is easier to recognize.

To exemplify (1), students' intonation performance in 3 sentences corresponding to two types of intonation - rising and falling - will be placed under thorough scrutiny. The measurement of improvement follows the rating criteria below (table 4.5):

Table 4.5 Improvement Scale

Score	Rating	Definition
1	Worse	No improvement
2	Mildly improved	< 25% improvement
3	Improved	25-49% improvement
4	Much improved	50-74% improvement

The table above is adapted from the Subject Global Aesthetic Improvement Scale (2019). It is used to measure and interpret the difference between the mean baseline and mean follow-up grades of the participants' prosodic patterns.

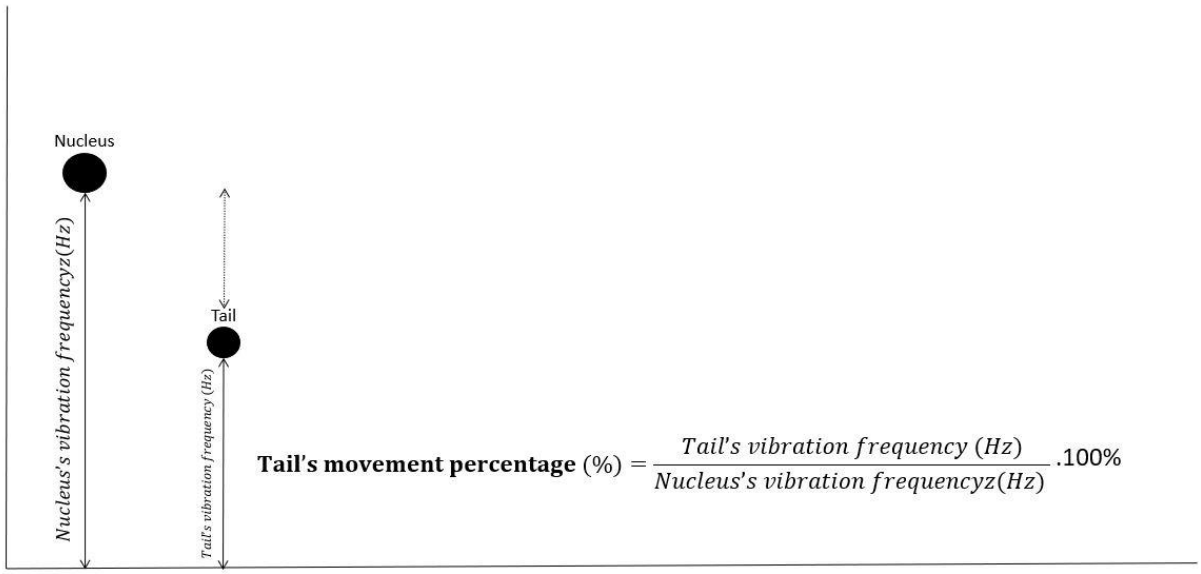


Figure 4.6 Tail movement description

$$\text{Improvement (\%)} = |(L_{Post} - G_{Post}) - (L_{Pre} - G_{Pre})|$$

***Note**: L = Learner's tail movement percentage in specific sentence type*

G = GTTS tail movement percentage in specific sentence type

(L_{Post} - G_{Post}) = percentage of the difference between learner's performance of falling/rising tones and GTTS' performance on falling/rising tones in POSTTEST

(L_{Pre} - G_{Pre}) = percentage of the difference between learner's performance of falling/rising tones and GTTS' performance on falling/rising tones in PRETEST

This formula is applied to the analysis of the participants' improvement in all types of sentences, which will be elaborated as follows:

● Default falling intonation 1 (Statement)

Table 4.7 The improvement of the participants' default falling intonation

Sentence type	Name	PRETEST	POSTTEST	Improvement (%)
		Tail movement percentage (%)	Tail movement percentage (%)	
Statement	Student A	73.52	77.49	0.94
	Student B	82.74	79.27	6.50
	Student C	89.22	85.76	6.50
	Student D	46.91	89.11	39.17
	Student E	58.00	72.79	11.76
	Student F	88.24	18.35	72.92
	Student G	62.59	62.86	2.76
	Google	38.31	41.35	

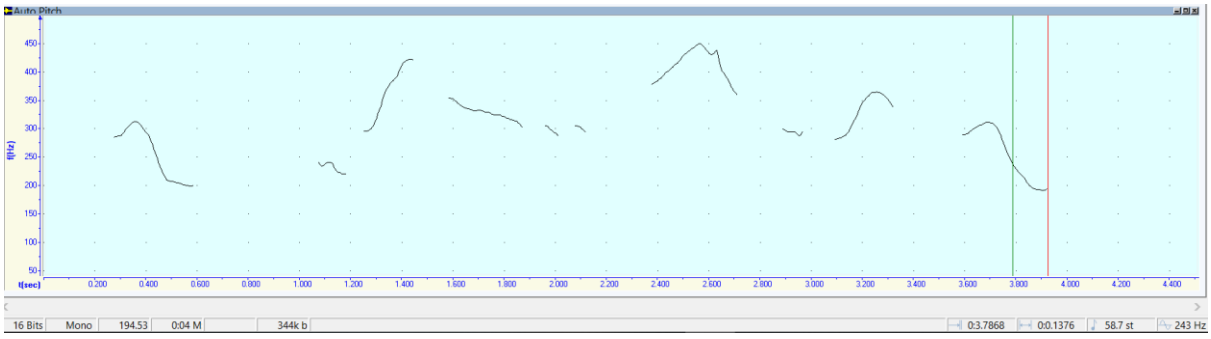


Figure 4.7a Student E's PRETEST performance of a Statement

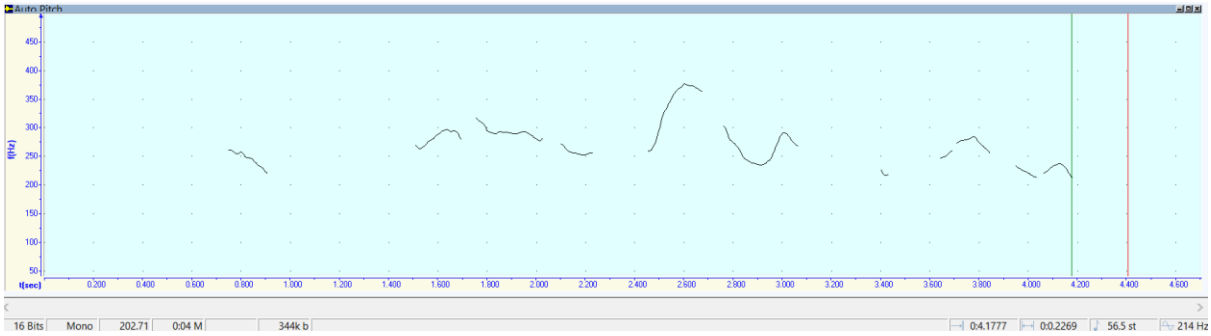


Figure 4.7b Student E's POSTTEST performance of a Statement

As depicted by **Table 4.7**, **Figures 4.7a** and **4.7b**, there is a slight overall improvement regarding the participants' default falling intonation in *statements*. Specifically, while one student shows a significant improvement of 72.92% in their default falling intonation and one with a considerable improvement of 39.17%, four others show mild improvement of more than 2%. However, one of them does not show any improvement after the online training course.

● Default falling intonation 2 (Exclamation)

Table 4.8 The improvement of the participants' default falling intonation

Sentence type	**Name**	**PRETEST**	**POSTTEST**	**Improvement (%)**
		Tail movement percentage (%)	**Tail movement percentage (%)**	
Exclamation	Student A	64.14	63.29	5.28
	Student B	149.43	24.93	128.93
	Student C	76.95	32.49	48.89
	Student D	62.25	63.27	3.41
	Student E	64.33	62.21	6.55
	Student F	105.36	29.93	79.86
	Student G	34.88	60.59	21.28
	Google	48.33	52.76	

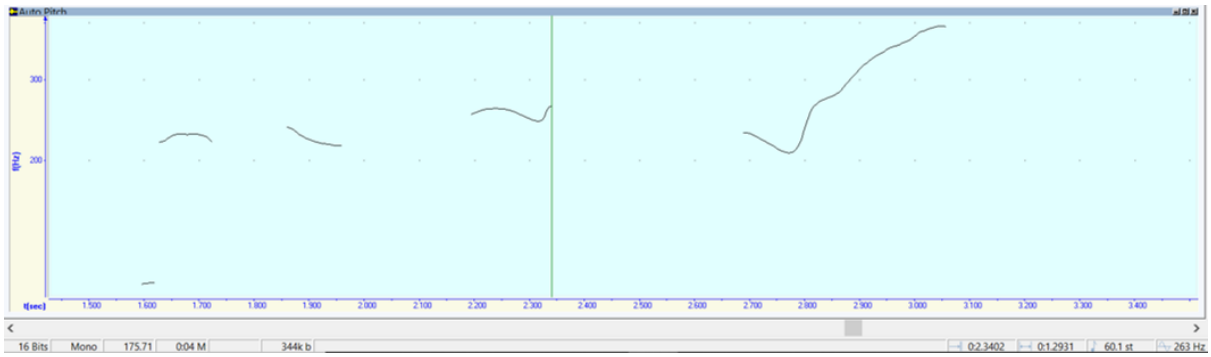


Figure 4.8a Student B's PRETEST performance of an Exclamation

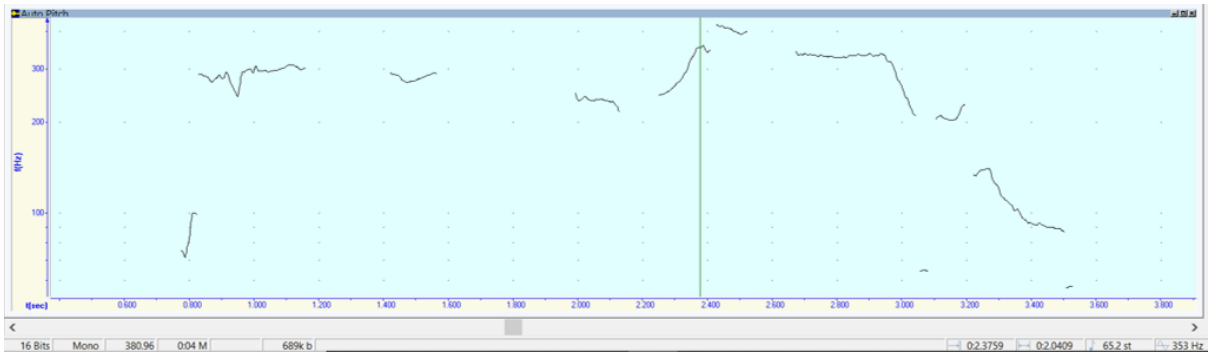


Figure 4.8b Student B's POSTTEST performance of an Exclamation

Table 4.8, **Figures 4.8a** and **4.8b** illustrate an overall mild improvement in the students' default falling intonation in *exclamations*. Two students among the group perform significantly better with 128.93% and 79.86% in the improvement rate. One of which shows a mild improvement of 48.89% in their English default falling intonation. The remaining four students show a slight improvement of more than 3% in their intonation performance.

● Default rising intonation 2 (Yes-No question)

Table 4.9 The improvement of the participants' default rising intonation

Sentence type	Name	PRETEST	POSTTEST	Improvement (%)
		Tail movement percentage (%)	Tail movement percentage (%)	
Yes-No question	Student A	82.27	107.25	38.17
	Student B	80.39	105.69	38.48
	Student C	95.86	177.83	95.16
	Student D	352.85	177.62	162.04
	Student E	185.02	158.65	13.19
	Student F	86.88	125.94	52.25
	Student G	57.64	100.44	55.99
	Google	120.68	107.49	

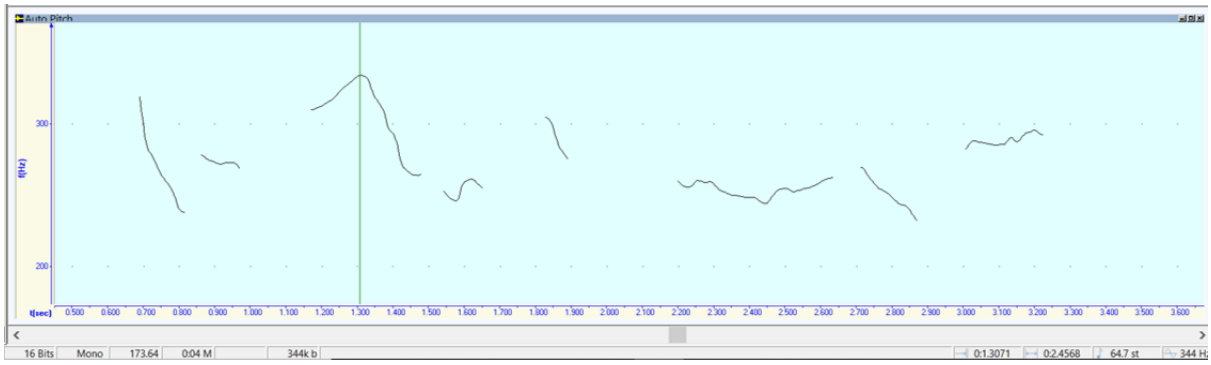


Figure 4.9a Student A's PRETEST performance of a Yes-No question

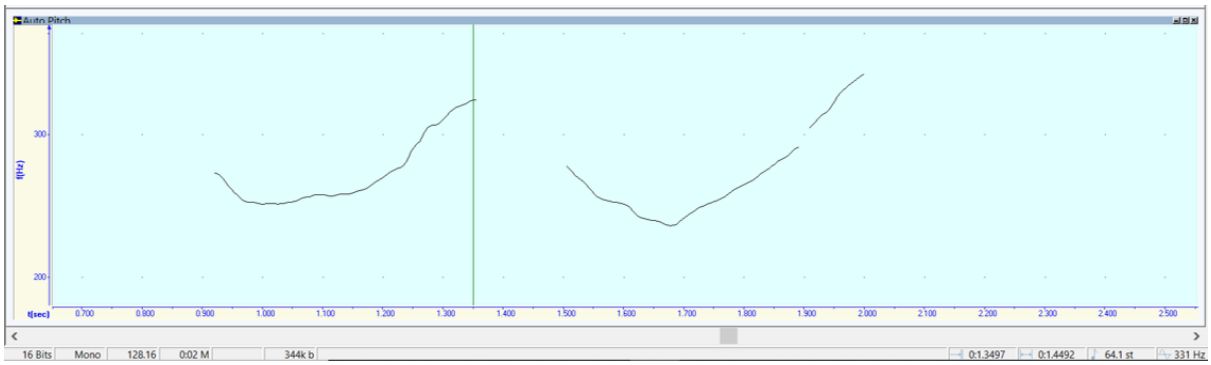


Figure 4.9b Student A's POSTTEST performance of a Yes-No question

According to **Table 4.9**, **Figures 4.9a** and **4.9b**, the students show an overall significant improvement regarding the participants' default rising intonation in *Yes-no questions*. In particular, one student performs 162.04% better in the posttest than in the pretest, which is a significant improvement. Three other students show considerable improvement of more than 50%, while the three remaining show mild improvement of more than 10%.

Addressing the first research questions posed from the beginning of this paper, it is evident that, in the pretest, the students performed relatively well in sentences that required falling intonation while they seemed to struggle with rising intonation. For the second question, the results suggest that the participants made significant progress in their use of rising intonation, whereas their performance in falling intonation hardly improved after the training course.

4.2. Merits of the study

Despite only a small number of learners taking part in the study, the research team is able to demonstrate a relatively positive result obtained by an alternative to costly tools and time-consuming approaches to teaching intonation. With the tool supported by Google and the framework clearly presented in the coursebook, it is reasonable to expect that teachers will be less likely to suffer from hard work and the fear of their own ignorance of the prosodic word. In addition, with the aid of the widely-available Google Text-to-Speech system, learning does not necessarily occur at school, which addresses a long-standing problem that no specific time is assigned to intonation teaching at school currently. Last but not least, the idea of taking Google Text-to-Speech as a model to imitate provides students with a purpose to learn. Indeed, 85% of those participating in the project reported that they felt a sense of achievement as they managed to imitate exactly what the machine said.

As claimed in the first place, the study delves into a new approach to intonation training, which is believed to benefit EFL teachers and learners in various ways. The vast availability of GTTS grants teachers easy access to one of the most highly approved AI applications in the modern world, with a huge authentic linguistic database. There is little syllabus time as well as few financial challenges involved, as the practice of intonation is not only refrained in the classroom setting, and users are not required to make registration or process any problematic installation. This study also successfully reveals a positive influence of the combination of GTTS and shadowing technique on learners' performance in intonation, especially when it comes to rising tone.

5. Conclusion

All in all, although the study succeeds in yielding certain positive results in learners' use of intonation, the small participant size, to a lesser or greater extent, prevents us from reaching any level of generalization for a larger population. Additionally, while the research team finds themselves in a rather fine position to answer the question of whether there is any learners' improvement in terms of intonation use, it presents, so far, an unsolved problem regarding the question of *to what extent*. This necessitates further research into the approach to gain more insight into its possible effects on intonation training and learners' perception of related prosodic features.

Apart from these, it should also be mentioned that the scope of this study does not seem to afford generalization of the result as it is rather small. Right from the onset, the research team encountered a number of difficulties in recruiting the participants. Although the initial questionnaires managed to reach out more than 100 participants, with approximately 70% showing their support when asked if they would like to participate in an online intonation training, only 14 showed up on the first day and the number then dropped down to only 7 towards the end of the training section. This can be attributed to 3 fundamental reasons. First, there is no commitment amongst those taking part in the project, though they were asked to affirm their commitment via a so-called agreement between the learners and the researchers. The fact that no punishment was administered for their one-sided drop might result in the sense of little obligation to the course. Without obvious gain and loss, it is virtually impractical to believe they would adhere to the training as, generally, students are not intrinsically motivated. Second, the course was initiated at the start of an academic year when university students seemed to be fully occupied in preparing for their classwork. Getting engaged in a course with an unforeseeable outcome could prove a waste of time to those already packed with their daily schedule. Another reason is that online learning, despite its particular merits, might seem daunting to a number of learners.

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Appendix

Appendix 1: PRETEST

Evaluation of English intonation performance

The following test is used to evaluate your English intonation performance as a means for the research team to design and adjust the online training course in the most effective way.
As there are 6 sentences in the test, please prepare separate recordings for each one. Then, please upload them to the Google Forms accordingly (maximum 10MB per audio file).
Note:
- Please use the type of intonation that you have already known and refrain from referencing external sources for the test so that the research team may gather the most objective evaluation of your performance.
- During recording, please make sure that your surrounding area is relatively quiet with minimum background noises.
- After recording, please make sure that your audio file is clear enough for the listeners to understand.

Full name
.....

Record the below sentences using the intonation that you have already known.
1. I don't think it is true that she was afraid.
2. Is it true that you faked your way in here?
3. Which question is going to make them uncomfortable?
4. Sounds impossible, doesn't it?
5. What a great view!
6. Don't rush or you will fall.

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Appendix 2: POSTTEST

Final Evaluation of English intonation performance

The following test is used to evaluate your final English intonation performance after taking the online training course as a means for the research team to evaluate the effectiveness of the method applied in the training course in improving students' English default intonation performance.

For the theoretical questions, please choose only ONE option or fill in the most appropriate answer that you have learnt.

For the recording question, please prepare separate recordings for each of the 9 given sentences. Then, please upload them to the Google Forms accordingly (maximum 10MB per audio file).

Note:

- Please use the type of intonation that you have already known and refrain from referencing external sources for the test so that the research team may gather the most objective evaluation of your performance.

- During recording, please make sure that your surrounding area is relatively quiet with minimum background noises.

- After recording, please make sure that your audio file is clear enough for the listeners to understand.

Full name

.....

Theoretical questions

Answer the following questions using what you have learnt (please refrain from using external sources during the test).

Question 1: Intonation features:

◯ the change of vocal pitch

◯ the change of prosodic features

◯ the rise of a person's voice to the highest point

Question 2: The use of monotone in reading/speaking indicates:

◯ the overwhelming of emotions which bring many expressions

◯ the lack of confidence

◯ the lack of emotion which makes it dull for the listeners

Question 3: What is the difference between *pitch* and *intonation*?

◯ pitch indicates the change in vocal pitch, intonation indicates the highest/lowest point in a person's voice

◯ pitch indicates the high or low vocal point/degree, intonation indicates the change/changing process of the vocal pitch

◯ pitch and intonation only differs based on perception

Question 4: How many basic types of intonation are there? What are they?

◯ 4 types: Flat tone / Rising tone / Falling tone / Falling-rising tone

◯ 3 types: Rising tone / Falling tone / Falling-rising tone

◯ 3 types: Rising tone / Falling tone / Upspeak tone

Question 5: Default tones should be understood as:

◯ the local dialect

◯ the most used tone for each specific type of sentence

◯ the difference in vocal tone between the male and the female

Question 6: Choose the suitable default tones for the below types of sentences:

	Falling intonation	Rising intonation
Wh-questions	◯	◯
Yes-No questions	◯	◯
Statements	◯	◯
Exclamations	◯	◯

Question 7: In general, rising intonation is used to indicate… / falling intonation is used to indicate... (short answer)

……

Question 8: To indicate uncertainty and doubts in the sentence: "I want to go to that party…, but…", what type of intonation should be used?

◯ Falling intonation

◯ Rising intonation

Question 9: To indicate enthusiasm and excitement in the sentence: "I'm glad to have you here", how would you change your falling intonation? (short answer)

……...

Question 10: The variation in intonation used in tag questions indicates many different layers of meaning. Choose the suitable intonation for the meaning of the sentence: "You've been to London once, haven't you?"

	Falling	Rising
The speaker genuinely wants to ask for information or is doubtful about his/her knowledge.	◯	◯
The speaker already has information and is certain about his/her knowledge.	◯	◯

Record the below sentences using the intonation that you have already known.

1. Are you serious?
2. Who was the girl you were talking to?
3. I don't think it's safe to go there, is it? (the speaker is unsure)
4. He has such a beautiful voice!
5. I believe it is going to rain at the end of the week.
6. Should I hand in my project?
7. I'm going to the park. Would you like to come?
8. He will be late again, isn't he? (the speaker already knows this)

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AsiaCALL Online Journal
ISSN 1936-9859; https://asiacall.info/acoj
Vol. 13, No. 1, 2022
pp. 122-131

Received: 12/10/2021
Revision: 25/11/2021
Accepted: 06/12/2021
Online: 08/12/2021

Learning English through a Challenge-Based Learning Project during the COVID-19 Pandemic

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EOI: http://eoi.citefactor.org/10.11251/acoj.13.01.007

Abstract

This study focuses on challenge-based learning (CBL) with native Japanese undergraduates from Waseda University in Tokyo (n=27). The study was implemented from May 2021 to November 2021 using Zoom and the SNS programs Facebook and Line for added support. Pedagogical training focused on helping students find solutions to many world issues in the 21st century, such as SDGs, AI, society, Cross-cultural IQ, and global leadership. In addition, throughout the Zoom online program, training in higher-order thinking skills and oral presentations were emphasized. Finally, survey results disseminated to the student participants (July 2921) are presented. The survey focused on gauging students' opinions about their virtual learning experiences during the COVID-19. Some of the notable survey results included: (1) 92% of students felt the online classes improved their oral production skills; (2) About 80% of students felt that they acquired seven 21st century skills; (3) About 74% of students acquired higher-order thinking skills; and (4) 96% of students felt the interaction with campus crusade for Christ (CCC) members helped them change their worldviews and improve English proficiency. The results indicated that CBL could effectively provide ample opportunities for students to use English regularly and improve their higher-order thinking and oral productions skills even during the COVID-19.

Keywords: higher-order thinking skills, flipped learning, Challenge-based Learning

1. Introduction

The COVID-19 pandemic has significantly impacted all aspects of society, particularly education. As a part of sustaining academic continuity during the pandemic, virtually all institutions and universities have switched from face-to-face classrooms to videoconferencing (Nguyen & Nguyen, 2021). The switch to online learning has resulted in various platforms such as Zoom and YouTube, the main tools used in the present study. Research has shown teachers have exhibited positive opinions toward studying through online education using Zoom. For example, Dau (2022) examined teachers' methods and perceptions of teaching English to

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children in Vietnam during COVID-19. According to the results, teachers' three most popular platforms were Zoom, Zalo, and YouTube. Despite some reported challenges, many teachers expressed enthusiasm for remote instruction. Serhan (2020), on the other hand, found that students negatively viewed Zoom use, although flexibility was cited as a significant benefit of using Zoom for education. Obari (2021) found that a combination of blended learning, such as hybrid learning with Zoom virtual classroom instruction, could effectively increase native Japanese undergraduates' English competence.

The present study focused on improving cross-cultural communication skills and widening the worldviews of university students for developing intercultural awareness and 21st-century skills through online learning using Zoom. The 21st century has already brought astonishing technological achievements with the Internet of Things, AI Cyber-physical systems, VR/AR/MR, and Big Data (Learning analytics). As a result, our lives have been transformed in many ways, and education is dramatically affected. The paradigm shift is now taking place because of the following factors: advancement of ICT and mobile technologies, crowd environments, developments of AI/IoT, and COVID-19As. As a result, the teacher's role has changed to that of a mentor, a facilitator, and a curator to deal with 21st-century skills. Digital technologies have changed life, communication, thinking patterns, channels of influence on other people, social skills, and social behaviors. Therefore, it is crucial to learn how to successfully transform into new language education to prepare for the digitalized society. A constructivist approach to flipped learning can motivate students by activating their brains to create new knowledge and reflect more consistently and deeply on their language learning experiences.

Furthermore, Bloom's higher-order thinking skills training is vitally important in education (Figure 1). The 21st century faces an unpredictable future, with creativity the key to education. This research includes two research questions.

(1) How could we integrate 21st-century skills into language education?

(2) How could we train the students to develop higher-order thinking skills?

So, how can online learning with Zoom and interaction with campus crusade members for Christ (CCC) contribute to enhancing higher-order thinking skills in language education? Ten tools were included in this study to support students who created PowerPoint slides and digital stories in preparation for becoming digitalized citizens – (Horizontal Report 2021, a YouTube video on AI and Society, Cross-cultural IQ, Global leadership, Worldviews, Ontology and Epistemology, Science and Theology, World Heritage sites, 17 SDGs, and Global issues

from the Oxford Martin School).

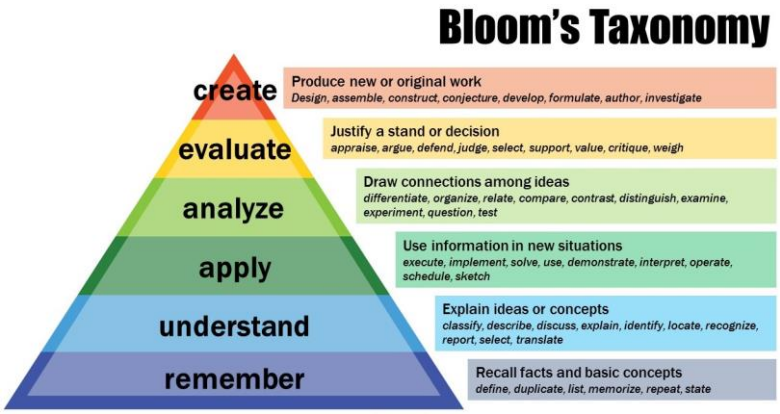

Figure 1: Bloom's Taxonomy

2. Literature review

Alan Turing (1950) once said, "I propose considering the question, 'Can machines think?'". Turing invented computers in the 1930s and soon became fascinated by the idea that computers might one day be intelligent. In 1950, he published a scientific paper on whether a machine could 'think.' The paper introduced the 'Turing test' (Wooldridge, 2018, p.6). Ninety years have passed since the invention of the computer. Nowadays, artificial intelligence (AI) has intervened in every aspect of our lives in the 21st century. AI today is everywhere, and it will soon become ever more prominent because AI software can reliably and efficiently make better decisions than people in a vast range of settings. In the future, AI will be invisibly embedded everywhere in which decisions are made (Wooldridge, 2018, p.44).

Recently, AI speakers can be experienced efficiently and smoothly using hand-held devices, enhancing the construction of broader learning environments and viewpoints (Kepuska & Bohouta, 2018). AI/mobile technologies have succeeded in transforming learning methodologies. One such methodology adopted in recent years is blended learning (BL) (Obari, Lambacher, & Kikuchi, 2020). BL combines traditional face-to-face classroom methods with computer-mediated activities, resulting in a more integrated approach to language learning. AI, mobile devices, and social media are the key components of the next generation of this novel wave of educational instruction. Digital content is also transforming and expanding as AI, and mobile technologies develop and improve. The growth of mobile social networking sites (mSNS) has enabled teachers to considerably increase the number of ideal learning opportunities through experiential learning activities with the help of these emerging technologies. For example, while the students were making presentations, the peer evaluation with the mobile device was used to assess students' presentations. This activity helped students engage more in oral production with quick feedback from peers. In addition, flipped lessons

were put into practice which focused on the presentations with digital storytelling and discussions in the classroom after students gained sufficient comprehensible input about the assigned tasks. As a result, their listening, speaking, and writing skills, to some extent, were reinforced. The students studied worldviews and held discussions with CCC (Campus Crusade for Christ) members, which helped them change their worldviews through online, face-to-face interactions at the breakout room.

Learning 21st-century skills (Figure 2) should be integrated into training, and 90% of students agreed it helped broaden their skills. Various digital technologies were used to understand different topics, and the distinction between the classroom and outside-class activities was distinguished. Each student could gain as much comprehensible input outside of the class through assignments and engage more in interaction and discussions with critical and creative thinking as they could inside the classroom. Whether it is a virtual interaction or not, most important in learning English is human interaction and how much comprehensible input we can gain from multiple learning sources, whether analog or digital.

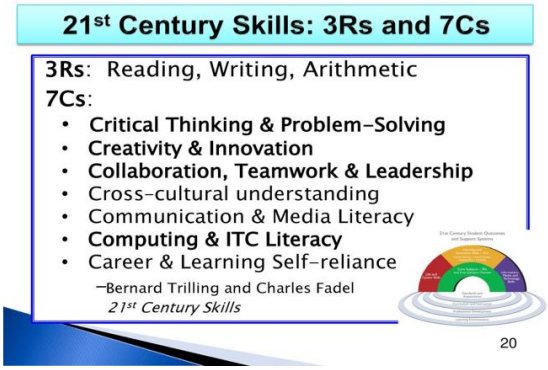

Figure 2: 21st Century Skills: 3Rs and 7Cs

3. Methods

All universities in Japan decided to teach classes using virtual learning environments with Zoom, TEAMS, Webex, and other learning tools, from May 2020 to January 2021. The lead author of this study taught ten classes at three universities, mainly with Zoom and Facebook. This section will describe how the students struggled with virtual learning and show its advantages and disadvantages from student feedback on a questionnaire.

3.1 Training procedure

(1) All students at three universities had their English lessons using real-time virtual learning with Zoom and Facebook. The learning materials were uploaded on Facebook in advance.

(2) Students engage in real-time learning with Zoom, listen to the author's mini-lectures, and participate in breakout sessions with more active discussions about the contents.

(3) Students prepared PowerPoint slides about their assigned work and delivered several presentations in front of all the students. However, they sometimes joined breakout sessions with four students and gave their presentations with peer assessment using PeerEval software on smartphones.

(4) Flipped learning was conducted throughout the semester, actively engaged in presentations and discussions about the contents assigned in advance.

(5) Students learned presentation skills by downloading the video contents of Successful Presentation by Oxford University Press. Each unit consisted of 8 units containing 3-minute video content.

(6) Professor Weakley from the US was invited as a guest lecturer several times and engaged in virtually teaching worldviews, global leadership, and cross-cultural IQ. He also actively took part in the breakout sessions and interacted with many students. Sometimes his students joined the virtual classroom from the US every three weeks and enjoyed discussing the cross-cultural differences between Japanese and Christian-oriented values. These sessions were most important for students to learn their worldviews.

(7) Several lectures from Oxford University professors about scientific realism and worldviews, and the students prepared PowerPoint slides with more presentations and discussions using Zoom breakout sessions (Figure 3).

Figure 3: A sample Zoom lesson.

3.2 Presentation Assessment with PeerEval

(1) Students delivered 5-10-minute English presentations about the assigned tasks with PowerPoint slides.

(2) All students had their presentations evaluated by their peers using the PeerEval software on a smartphone, with six items being assessed about presentation skills. After each presentation,

immediate feedback was provided with comments about improving their presentation skills (Figure 4).

(3) Students were highly engaged in learning the contents of the cross-cultural issues and worldview studies, including the advancement of AI.

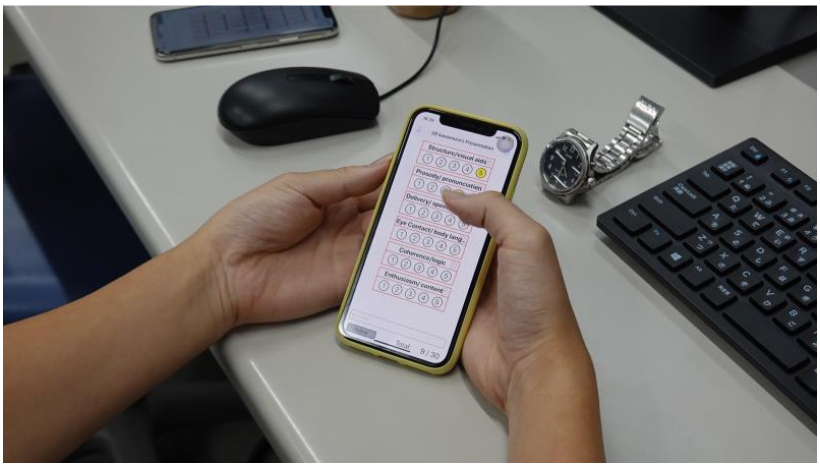

Figure 4: Peer Eval Assessment with a smartphone

3.3 Feedback on the student questionnaire

Questionnaires on virtual online learning asked if participants (n=27) of this study acquired the 21s-century skills or not.

(1) Did you develop critical and problem-solving skills? (n=27)

a. 96% agreed

b. 4% neutral

(2) Did you develop the skills of creativity and innovation? (n=27)

a. 85.2% agreed

b. 14.8% neutral

(3) Did you develop the skills of collaboration, teamwork, and leadership? (n=27)

a. 85.2% agreed

b. 14.8% neutral

(4) Did you develop the skills of cross-cultural understanding? (n=27)

a. 81.5% agreed

b. 11.1% neutral

c. 7.4% disagreed

(5) Did you develop the skills of communication and media literacy? (n=27)

a. 88.9% agreed

b. 11.1% neutral

(6) Did you develop the skills of computing and ICT? (n=27)

a. 81.5% agreed

b. 14.9% neutral

c. 3.6% disagree

(7) Did you develop the skills of career & self-reliance? (n=27)

a. 77.8% agree

b. 18.5% neutral

c. 3.7% disagreed

(8) Did you acquire higher-order thinking skills? (n=27)

a. 74.1% agreed

b. 25.9% neutral

(9) Did the interaction with the campus crusade for Christ (CCC) members at the breakout room help you improve your English proficiency? (n=27)

a. 92.6% agreed

b. 7.4% disagreed

(10) Did the interaction with CCC members at the breakout room help you change your worldviews and become more interested in foreign cultures? (n=27)

a. 96.3% agreed

b. 3.7% neutral

(11) Did the visiting professor's lectures change your worldviews and help you to improve your English proficiency? (n=27)

a. 91% agreed.

b. 9% disagreed

(12) Was the virtual presentation at the breakout room with Zoom effective in learning English? (n=27)

a. 92.5% agreed

b. 7.5% neutral

(13) What type of lessons do you like most? (n=27)

a. 18.5% Face to face lesson

b. 55.6% Synchronous Online Zoom lesson

c. 7.4% Hybrid lesson

d. 18.5% Video-on-demand lesson

4. Results/Findings and discussion

Virtual online Zoom lessons were carried out for two terms in two classes. According to the survey questions about 21st-century skills from questions (1) to (7), almost 80% ~95% of students agreed that they developed seven 21st-century skills, enjoyed the Zoom lessons, and felt it effectively taught English. Question (8) about acquiring higher-order thinking skills indicated that only 3/4, 75% of students could develop it, but 1/4, 25% did not think so. For future research, the reason for not developing this skill must be more researched. According to questions (9) to (11), more than 90% of students agreed that interacting with foreign English speakers a lot every three weeks helped them enhance their English-speaking ability and keen on learning other cultures. In addition, by observing the online classroom, students were highly engaged in interaction in English to develop their higher-order thinking skills for the digitalized society.

Last year when the Zoom lesson began, only 30 % of students felt they could learn English even with virtual online lessons. This year I invited many different foreign speakers to my virtual Zoom class every three weeks (first term) and every other week (second term) to increase the amount of interaction. According to question (12), more than 90% agreed that the virtual presentations helped the students improve their English. Furthermore, questions (13) indicated that more than 55% of students liked the online Zoom lesson better than last year's questionnaire.

We assumed that the CBL project and interaction with CCC members helped students improve higher-order thinking skills and critical thinking skills. Inviting the visiting scholars during virtual lessons was more manageable as the foreign lecturer significantly helped students improve their English proficiency and become more open-minded. To some extent, future lessons could be easily integrated with AI and virtual online classes through interactions with foreign people.

5. Conclusion

Living in Society 5.0 with DX due to the rapid advancement of cutting-edge technologies, AI/VR will be playing a vital role in language education to deal with urgent, complex world problems using AI, VR, and Learning Analytics. This study provided hints for 21st-century learning to enhance higher-order thinking skills and critical thinking skills through online virtual dialogues with CCC members even during the COVID-19 crisis.

These results indicate that the integration of the CBL training program with

presentations played a crucial role in improving the students' overall language proficiency and expanding their worldviews. In addition, the students were virtually engaged in interacting more with young CCC members to study different worldviews. The results suggest that integrating the CBL project with 21st-century skills, including PeerEval, and hybrid learning with Zoom virtual classroom teaching, may be an effective way to improve the English proficiency of native Japanese undergraduates. In future research, more cognitive sides of examining higher-order and critical thinking skills, what is going in the brain, should be more carefully researched with MRI (Magnetic Resonance Imaging).

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Acknowledgments

Soken Grant (2018~2022) and JSPS KAKENHI (2019~2022), Grant in Aid for Scientific Research (C), Grant Number: 19K00798 supported this work.

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AsiaCALL Online Journal
ISSN 1936-9859; https://asiacall.info/acoj
Vol. 13, No. 1, 2022
pp. 132-149

Received: 31/10/2021
Revision: 01/12/2021
Accepted: 09/12/2021
Online: 10/12/2021

The Challenges of Online Writing Learning via Microsoft Teams

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Abstract

The purpose of this study is to investigate the challenges that EFL learners at Van Lang university faced when they learned writing in an online course via Microsoft Teams. 96 third-year students from two classes were required to complete a 10-item questionnaire for their online 10-week writing course. The findings revealed that they faced nine kinds of challenges related to technical problems, lack of concentration, lack of interaction, time management, health problems, gaining knowledge, motivation, psychological problems, and collaboration. The study suggests some implications for teaching writing skills to EFL learners online through Microsoft Teams.

Keywords: Writing skills, EFL learners, Microsoft Teams, online, social interaction

1. Introduction

Due to the Covid-19 pandemic, students have to take writing courses online via Microsoft Teams. Scholars in the world have studied learners' taking online courses through Microsoft Teams and other online platforms. Allen and Seaman (2017) reported that about six million students enrolled in online classes in 2015 compared to 1.6 million learners in 2002. This means that a growing number of students have been learning online. It is also a case at Van Lang university where EFL students have been enrolling in online writing classes via Microsoft Teams with numerous challenges.

There are some advantages and disadvantages of learning online assisted by technology. Dorf (2019) classifies educational technologies into learning tools, educational resources, learning environments, and learning methods. Moreover, Bentley et al. (2012) and Nguyen (2015) support teaching and learning processes through internet connections, and this kind of learning process is regarded as an online/virtual learning system. Furthermore, Rojabi (2020) shows some differences between online learning and teaching from the conventional face-to-face classroom where students are present physically. He indicates the disadvantages of the face-to-face classroom, such as students' lack of chances for communication, self-confidence, and responding, and he also points out the advantages of online learning, including flexibility and

an engaging learning environment, which are beneficial for students learning. Additionally, Landrum et al. (2020) assert that virtual interaction in online classes offers convenience and flexibility thanks to unique characteristics of a learning management system, including authoring tools, feedback tools, rubrics, chat discussion, assignment submission, and files sharing. Also, Zayapragassarazan (2020) observes that online learning improves the learner's learning autonomy and self-discipline for their learning progress. However, Nguyen and Duong (2021) conducted their study on challenges of E-learning through Microsoft Teams for EFL students at Van Lang University in Covid-19 and found that the challenges they faced stem from two sources including external essentials and learners' own consciousness. These challenges were related to the internet connection, machine error, software error, and so forth.

A great number of researchers (e.g., Henderson et al., 2020; Tsai, 2018) have agreed that the Microsoft Teams application supplies better useful features such as chat rooms, collaborative discussion, content sharing, and video conferencing.

At Van Lang University, EFL students have shifted from traditional classes to the online classroom due to the Covid-19 pandemic. A lot of students have not been familiar with this way of teaching and learning writing. This is the reason why these students have challenges with online writing learning via Microsoft Teams. This study aimed to investigate the challenges that EFL students at Van Lang university face when they learn writing courses online through Microsoft Teams.

2. Literature review

Online learning

Online learning is considered an effective learning method. Zayapragassarazan (2020) pinpointed that online learning encourages learners' autonomy and self-discipline for their learning progress. Rojabi (2020) mentions that the student's participation, motivation, self-discipline, and learners' autonomy are emphasized in online learning.

MS Teams is considered as one of the effective online learning platforms. Microsoft Teams is a loud app digital hub that combines conversations, meetings, files, and apps together in a single learning management system (Microsoft, 2018). MS Teams is used by a great number of learners and teachers because its applications are easily downloaded through desktop and mobile devices, and outstanding features consist of chat rooms, collaborative discussion, screen content sharing, and video conferencing (Henderson et al., 2020; Ilag, 2020; McVey et al., 2019).

Challenges of learning via Microsoft Teams

There are some disadvantages of Microsoft Teams. First, teachers are unable to see their student's body language. It means that there is a lack of nonverbal hint expression of confusion on the students' faces which helps the teacher measure their students' understanding (Rojabi, 2020). Students cannot communicate with their teachers face-to-face all the time. Additionally,

teachers and students have to take more time to assess learners' online teaching and learning process (Bakerson et al., 2015).

Moreover, Sun (2014) points that online learning lacks an organized schedule, repeated studying, and self-motivation. Also, previous studies have examined the level of learner's satisfaction towards interaction and learning environment. Fortune et al. (2011) observe that dimensions of online learning comprise face-to-face communication, learning environment, technology, preferences, and collaboration. These factors have impacts on teaching and learning writing online via Microsoft Teams.

Previous studies

Some researchers have investigated online learning via Microsoft Teams. Rojabi (2020) conducted his study to explore EFL students' attitudes towards online learning via Microsoft Teams. His study involved 28 university students who completed questionnaires through Google Forms after the course. The findings indicated that online learning through Microsoft Teams optimally enhanced the students' online learning environment. They had positive attitudes towards student-student interaction and student-teacher one when they experienced online learning via Microsoft Teams. The study suggested that future studies investigate students' satisfaction with taking online classes and the benefits of online classes via Microsoft Teams.

Similarly, Lin and Lin (2015) maintain that student-student and student-teacher interaction should be constructed to enhance communication and discussion in the process of teaching and learning. Besides, Radovan and Makovec (2015) assert that a learning environment is essential to create enthusiasm for students' learning. This motivates them to study better.

Tran (2021) carried out her study to examine the effectiveness of using Microsoft Teams for EFL learning of freshmen at Van Lang University. Eighty first-year students completed the fifteen-item questionnaire. Her findings indicated that utilizing Microsoft Teams effectively taught and learned EFL at Van Lang university and that the students had positive attitudes towards the advantages of using Microsoft Teams for their online study. However, she also pointed out some disadvantages of Microsoft Teams in online teaching and learning.

In addition, Ha and Ngo (2021) investigated the challenges of listening comprehension faced by English majors at Van Lang university when they studied listening skills via Microsoft Teams. 135 students participated in the study, and they had to complete questionnaires and answer for a semi-structured interview. The findings revealed that the students faced some challenges such as psychology, technology using skills, English competence, listening activities, and study environment when they studied listening skills online through Microsoft Teams. They also gave some suggestions for teaching and learning listening skills online via Microsoft Teams.

Research gap

There has been a great number of research on the benefits of online learning via Microsoft Teams; however, only a few research studies have been carried out to study the challenges of learning writing courses online through Microsoft Teams in Vietnam and at Van Lang University. This study aimed to fill this gap to investigate the challenges encountered by EFL students at Van Lang University in their online writing course via Microsoft Teams.

Research Question

To fulfill the purpose of the study, the study was designed to address the following research question:

What challenges did the students at Van Lang university face in online writing courses via Microsoft Teams?

3. Methodology

This study was conducted in two online writing classes at Van Lang University. Ninety-six students from these two writing classes participated in the study. They were third-year students, and they took this course as a compulsory subject in their learning process via Microsoft Teams. After finishing the ten-week writing course, the students completed the 10-item questionnaire about their challenges in online writing class.

This study employed a mixed-method to collect the data. The questionnaire consisted of 10 items in which there were nine items in the form of 5-point Likert (1: strongly disagree; 2: disagree; 3: neutral; 4: agree; and 5: strongly agree), and one item for the opened-ended question. The questionnaire survey was delivered and collected to examine the students' challenges in their online writing via Microsoft Teams.

All the responses to the questionnaire were collected online through Google Forms. Additionally, the data obtained from the questionnaire were presented in the form of tables and figures to indicate the challenges that the students at Van Lang university faced in their online writing course through Microsoft Teams.

4. Results/Findings and discussion

The challenges that the students at Van Lang university faced in online writing course via Microsoft Teams

The 10-item questionnaire was designed to collect data for quantitative and qualitative analysis, as shown in Table 1. The data analysis provided the percentages of the student's answers to the first nine questions of the questionnaire.

Table 1: Questionnaire for challenges of online writing learning

Challenges of online writing learning	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. I have technical problems when I take this online writing course via Microsoft Teams.	1.0%	8.3%	27.1%	40.6%	22.9%
2. I am unable to concentrate on my learning when I take this online writing course via Microsoft Teams.	4.2%	18.8%	38.5%	34.4%	4.2%
3. There is a lack of student-student and student-teacher interaction when I take this online writing course via Microsoft Teams.	1.0%	13.5%	39.6%	37.5%	8.3%
4. I am not good at managing time when I take this online writing course via Microsoft Teams.	2.1%	27.1%	38.5%	27.1%	5.2%
5. I have some health problems when I take this online writing course via Microsoft Teams.	2.1%	20.8%	44.8%	25.0%	7.3%
6. It is difficult for me to gain knowledge when I take this online writing course via Microsoft Teams.	1.0%	12.5%	45.8%	31.3%	9.4%
7. I am not motivated when I take this online writing course via Microsoft Teams.	3.1%	16.7%	43.8%	29.2%	7.3%
8. I have some psychological problems when I take this online writing course via Microsoft Teams.	0%	5.2%	35.4%	41.7%	16.7%
9. I find it difficult to collaborate with my classmates when I take this online writing course via Microsoft Teams.	3.2%	31.6%	40.0%	17.9%	7.4%
10. What challenges did you face when you took this online writing course via Microsoft Teams?					

The qualitative analysis for the 10th item of the questionnaire revealed that the students at Van Lang university faced numerous challenges when they learned their writing courses online via Microsoft Teams.

Technical problems

The students reported that they faced some technical problems. The slow internet transmission or wi-fi had impacts on their online writing learning. Also, they lacked digital devices and equipment to study online. Even their laptop or cell phone microphone was out of work, so they could not answer the teacher's questions. Besides, they were annoyed with the redundant noise from their online classmate's microphone and cell phone and the structure of files on Microsoft Teams because they thought that the file structure was confusing for users to use and some tools

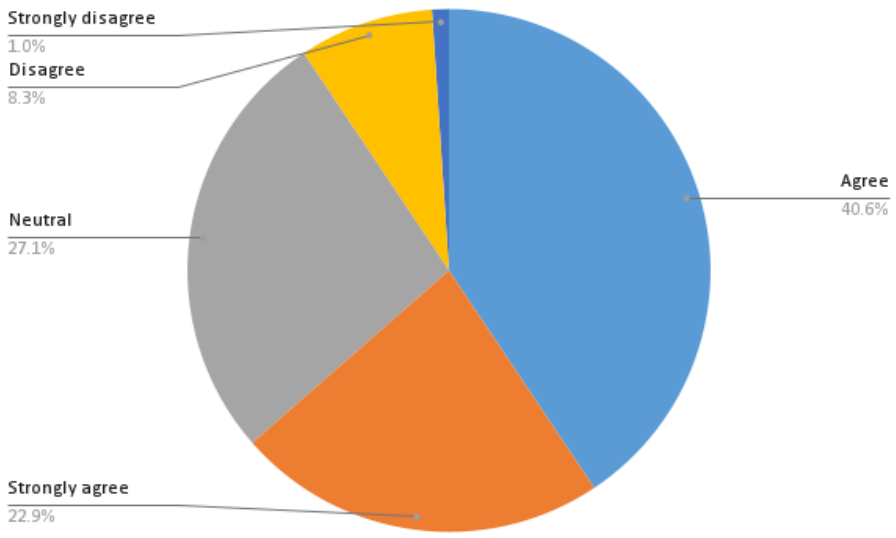
on Microsoft Teams were similar and redundant.

Table 2: Technical problems

Student	Comments
1	The disadvantage is that I have already clicked submit when submitting the article but haven't turned it in, so I haven't submitted it yet.
6	The connection sometimes is weak
8	Wi-fi connection sometimes is not stable. My laptop also has some mistakes after a long time of using.
9	Slow transmission
11	Disconnected with the internet or cannot join the class.
12	Sometimes I lost my internet connection
13	The wi-fi connection made me feel difficult to listen to the lecturers.
14	Sometimes my internet isn't good
16	Slow internet
17	Technology issues
18	Network problem
29	Sometimes I have trouble when Microsoft Teams doesn't show assignment reminders or teacher notifications
31	App does not have high security
34	Slow internet is a problem that makes me disconnected to the teacher
35	No equipment, no facilities make me difficult to study
37	I usually lost connection
39	Disadvantages : feel disconnected
40	My challenge is that I must listen to the lesson, but the microphone of teacher is not loud enough.
42	Perhaps it is a technological problem.
45	I face a lot of difficulties when I study online because I don't have a laptop. The network can be lost at any time because I use 3G and have to register every day which costs a lot of money.
59	Sometimes the connection is lost.
63	Slow internet connectivity
64	The internet at my home sometimes disrupted the lesson
65	Sometimes the internet connection is slow and I get kicked out of class.
68	Slow internet connection.
69	No mic; Teacher do not usually check the chatbox (big disadvantage).
77	Sometimes when the wi-fi connection was slow, it affected the learning process
83	When I try to understand the lecture, I have to listen carefully to what the teacher said, but a low Internet connection is obstructed that I cannot hear at all. And sometimes, people get distracted by many things around them while learning online.
86	File structure confuses users, similar and redundant tools.

The percentages of the participants who strongly agreed and agreed that they had some technical problems were 22.9% and 40.6%, respectively. Only 9.3% of the participants answered that they faced no technical challenges.

Figure 1: Technical problems



Lack of concentration

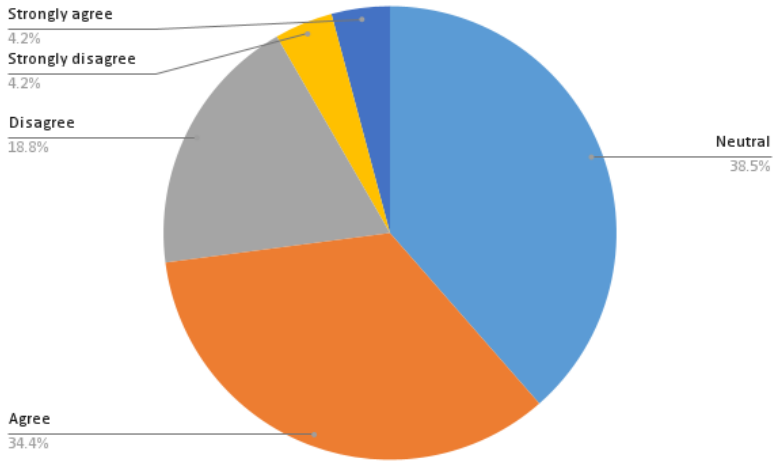
The findings revealed that the students lost their concentration during their online writing class. They answered that they did not have a private place for learning, and they sometimes did not know exactly what they were studying and did not understand teachers' online lectures. Additionally, they feel distracted during their online writing class because of certain inconveniences.

Table 3: Lack of concentration

Student	Comments
2	I can't completely focus on the lesson. In terms of the inconvenience, I don't think Microsoft Teams has one.
4	Hard to know exactly that students are studying or not
10	Online learning often causes us to lose more focused because things around like phones, drowsiness, ...
19	Hard to concentrate on professor's lecture
27	You will have to carefully pay attention to the lesson or you won't understand anything, because I think online teaching would be hard for us if you are neglecting
30	May not be able to fully concentrate on the lecture
32	I'm easily distracted, hard to concentrate, less interaction.
33	Although I was a bit stuck with housework, I managed to arrange it.
45	I am easily distracted because the school environment at home has a lot of distractions such as sounds, food, ...
88	I don't have the personal space for learning, the noise around is so loudly

18.8% and 34.4% of the participants strongly agreed and agreed, respectively. So, over half of the students felt distracted in their online writing class via Microsoft Teams. 38.5% of them had neutral answers, which means they neither agreed nor disagreed.

Figure 2: Lack of concentration



Lack of interaction

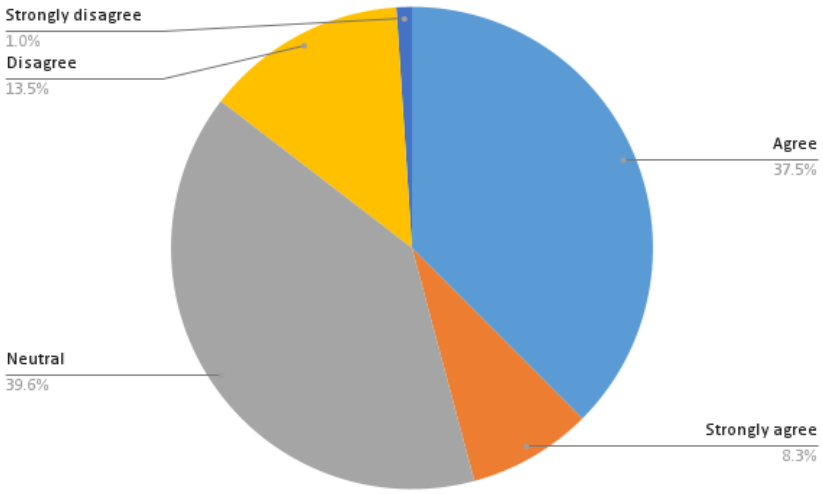
The findings indicated that there was less interaction with their teachers and classmates in the online classroom than that in traditional one. Not interacting with teachers face-to-face had an influence on their understanding of what they learned. Also, they reported that the class became less fun because of the lack of face-to-face interaction with their teachers and peers.

Table 4: Lack of interaction

Student	Comments
15	Lack of interactions
18	Less interaction with teachers
22	Online student feedback is limited
26	The disadvantage is not being able to communicate directly like in real life
45	Students also do not interact directly with teachers, so they often do not know clearly what they are learning
50	Teacher cannot see my reactions in the class
52	I think without direct interaction, the class is less fun
53	Too many things distract me
76	Can't interact face to face

The findings revealed that 37.5% of the students agreed that they needed more interaction with teachers and classmates, and 8.3% of them strongly agreed that they faced communicative problems with teachers and classmates when they studied writing online. They thought that the online, face-to-face interaction was not like direct face-to-face communication in real life.

Figure 3: Lack of interaction



Time management

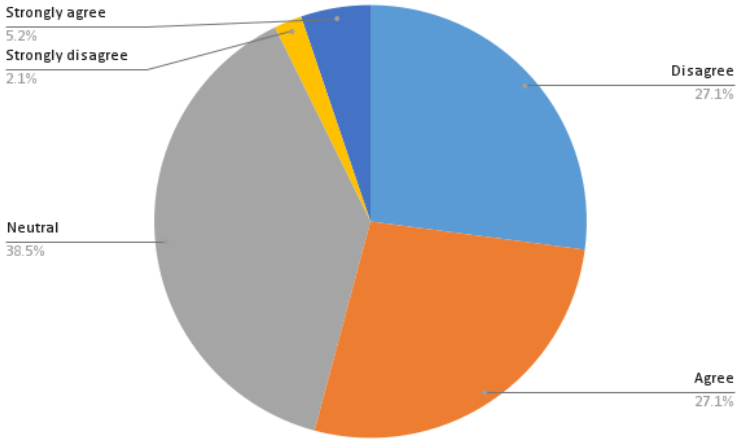
As seen from Table 5, the students had a challenge of deadline duration. They also believed that online courses required more time than on-campus classes, which asked them to study independently much more. The students were found to lack time management skills, so they could not remember when to submit their online assignments on time.

Table 5: Time management

Student	Comments
75	Deadline duration
84	Online courses require more time than on-campus classes, allow you to be more independent
22	Time management skills

The findings revealed that 27.1% and 5.25 of the students respectively agreed and strongly agreed that they lacked time management skills. They did not arrange their time properly.

Figure 4: Time management



Health problems

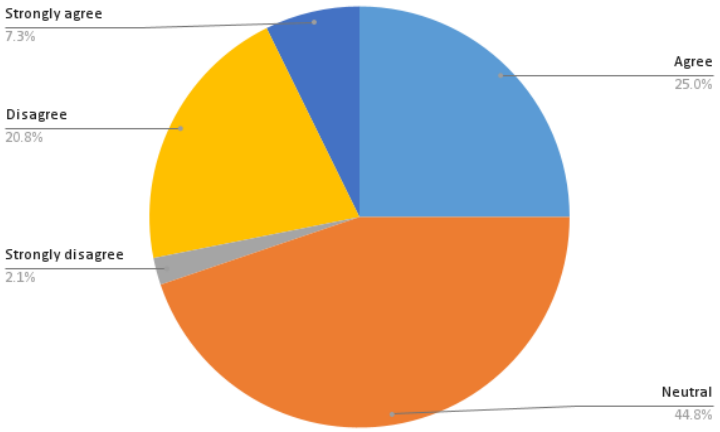
The findings showed that the students had some health problems. Their eyes got tired because they spent too many hours looking at the screen. They found that their eyesight and vision got worse. Therefore, studying writing online via MS Teams had impact on the students' health.

Table 6: Health problems

Student	Comments
3	Tired eyes
45	I feel tired, blurred vision.
51	Sitting too much will affect eyesight
57	I get tired looking at the screen
60	Studying online has a lot of impacts on my health

The results showed that 27.1% of the participants strongly agreed and agreed on health problems brought by online writing learning. 20.8% of them disagreed that online learning caused some health problems.

Figure 5: Health problems



Gaining knowledge

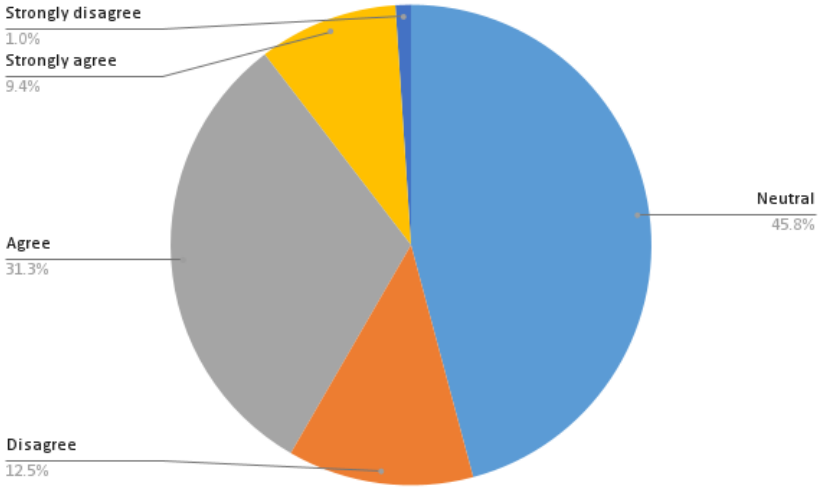
The students commented that their ability to absorb lessons was limited in comparison with their gaining knowledge at school. This leads to a lack of understanding of lectures, which impacts their academic performance. They reported that their knowledge from online writing classes never showed real understanding. This can be explained that they cut/copied and pasted online materials to submit their assignments in the online writing course.

Table 7: Gaining knowledge

Student	Comments
18	The ability to absorb lessons is more limited than in school
45	Whether the student understands the lesson or not, the exercises never show real understanding.
47	Lack of understanding the lecture
60	I can't understand the lesson as I do at school

The percentages of 9.4% and 31.3% showed the number of the students who respectively strongly agreed and agreed on their inadequate knowledge gained from the online writing course. 46.8% of the students had neutral answers. However, 13.5% of the students disagreed on not gaining knowledge from online writing courses.

Figure 6: Gaining knowledge



Motivation

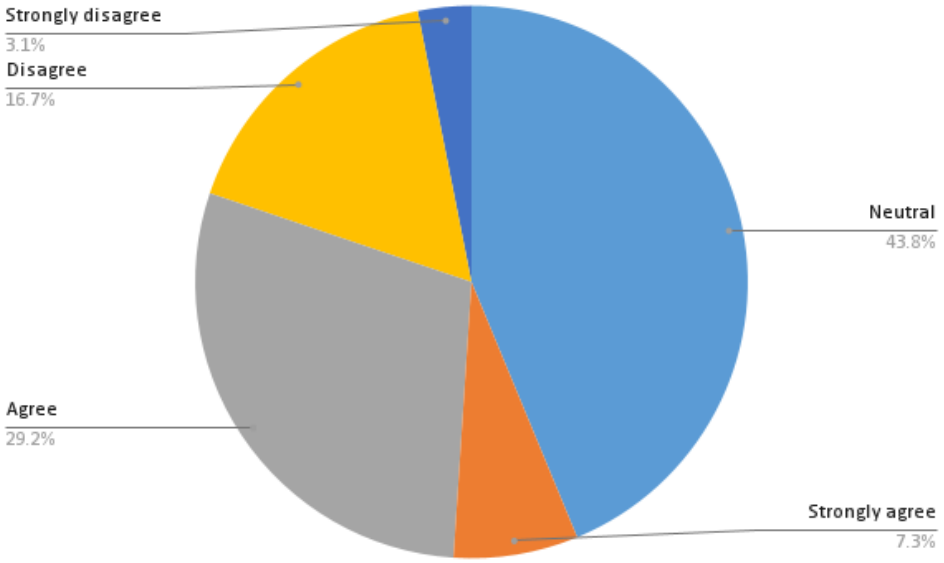
The findings indicated that the participants lacked motivation in the online writing course. They did not have enough motivation to study as much as they did at school. They believed that online writing learning required strong self-motivation of EFL learners.

Table 8: Lack of motivation

Student	Comments
57	I lack motivation
60	I don't have the motivation to study as much as I do at school
22	Requires strong self-motivation

7.3% and 29.2% of the students strongly agreed and agreed on their lack of motivation when they learn writing courses online. 43.8% of the participant answered neutrally. Only 19.8% of the students were found to have enough motivation for their online writing course.

Figure 7: Lack of motivation



Psychological problems

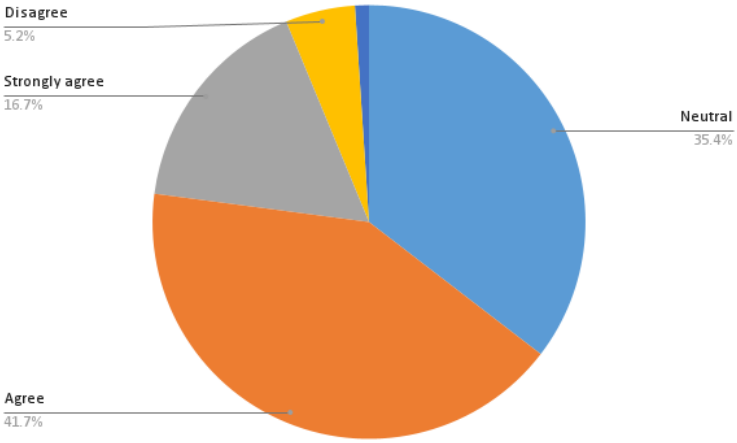
The findings also indicated that the students had some psychological problems when they studied writing courses online. They thought that staying away from school made them uncomfortable. They felt drowsy and lazy. Also, they believed that learning writing courses online via MS Teams caused their social isolation. It means that they were not comfortable and motivated for their online writing learning.

Table 9: Psychological problems

Student	Comments
22	Staying away from one place makes me not comfortable
22	MS Team can cause social Isolation
75	Sloth, drowsy feeling

The number of the students who agreed that they had some psychological problems related to their online writing learning was 58.4%. Only 5.2% of the participants disagreed that they had psychological problems. However, 35.4% of the participants answered neutrally.

Figure 8: Psychological problems



Collaboration

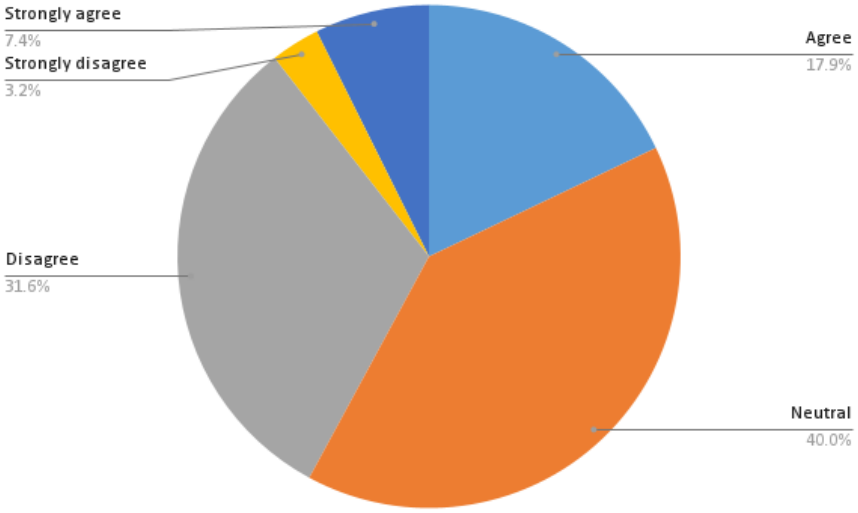
The students commented that they could not collaborate with their classmates in the online writing course. Additionally, the feedback from their teacher and peers was slow. Moreover, they reported that there was a lack of communication skill development in online writing classes.

Table 10: Collaboration

Student	Comments
74	Less connect and slow feedback
22	Lack of communicational skill development in the online class
73	I can't exchange with others because while online learning. I can't make friends and contact them if I need to ask about the lesson.

The findings revealed that the students could not collaborate with their friends well in their online writing courses, with the percentages of 7.4% of the students who strongly agreed and 17.9% of the students who agreed. 40.0% of the participants answered neutrally. 33.8% disagreed that they could not cooperate with their friends when they studied writing online. In general, the students could not exchange ideas with other classmates during online learning.

Figure 9: Lack of collaboration



5. Discussion

From the findings of the study, it can be said that the challenges that the EFL students at Van Lang university faced were synthesized in the following table.

Table 11: The challenges encountered by EFL students in their online writing learning

Number	Challenges of learning writing online
1	Technical problems
2	Lack of concentration
3	Lack of interaction
4	Time management
5	Health problems
6	Gaining knowledge
7	Lack of motivation
8	Psychological problems
9	Lack of collaboration

The findings of this study were not in line with Poston et al. (2020) that Microsoft Teams would be beneficial when there were group work and collaborative assignments. Additionally, the findings of this study were not completely similar to Rojabi's (2020) findings indicating that the students felt comfortable in discussing collaboratively and actively engaged in learning online because this online learning was new and challenging.

This study's findings were aligned with Nguyen and Duong's (2021) findings that the challenges the students at Van Lang university faced were related to external factors and learners' perceptions.

It is suggested that EFL writing teachers should consider these challenges to facilitate their students' online writing learning. From these challenges of online learning via Microsoft Teams, Rojabi (2020) suggests that teachers should supply learners with non-linguistic expressions (i.e., facial expressions or body language), useful learning materials and online learning instruction to encourage to actively engage in online learning classroom. The results of this study was partly similar to Fortune et al. (2011)' study on some dimensions of online learning such as face-to-face communication, learning environment, technology, and collaboration.

6. Conclusion

The study found a great number of challenges that EFL students at Van Lang university faced. The challenges were related to (1) technical problems, (2) lack of concentration, (3) lack of interaction, (4) time management, (5) health problems, (6) gaining knowledge, (7) motivation, (8) psychological problems, and (9) collaboration. The study results will help the EFL teachers and learners recognize the challenges and find ways to overcome them in the process of learning and teaching writing online via Microsoft Teams.

This study bears some limitations. The size of the participants was small, so the findings of the study could be overgeneralized. Additionally, the study failed to use other instruments such as tests and interviews to examine the influences of the above challenges on students' academic achievements in the online writing course.

Future research should explore strategies that students use to overcome the above challenges in their online writing class via Microsoft Teams and should use a diversity of research instruments to investigate the topic of this study more deeply.

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AsiaCALL Online Journal
ISSN 1936-9859; https://asiacall.info/acoj
Vol. 13, No.1, 2022
pp. 150-165

Received: 19/10/2021
Revision: 05/12/2021
Accepted: 12/12/2021
Online: 17/12/2021

Quizlet as a Tool for Enhancing Autonomous Learning of English Vocabulary

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DOI: https://doi.org/10.54855/acoj221319

ABSTRACT

L2 vocabulary learning seems to be one of the biggest challenges for many language major students as lexical knowledge involves productive understanding of its many components, including the form, meaning, and application of the terms (Nation, 2001). It is, therefore, necessary to find appropriate language education tactics and instruments for the successful and efficient acquisition of this aspect of the L2. Among advancements in the field of educational technology, Quizlet was invented with the hope that learners could effectively acquire L2 vocabulary in the absence of the teacher. In this study, the researchers want to figure out if Quizlet is helpful in assisting students in learning English vocabulary. They would also like to identify the difficulties that learners may encounter when using the application for their self-study. A quantitative survey was conducted on 100 English major freshmen and sophomores at a university in Ho Chi Minh City, Vietnam. Results reveal that Quizlet plays an active role in facilitating self-study of English vocabulary. A remarkable finding is that an application seems to provide an entertaining learning environment, which in turn enhances learning motivation. Besides, a couple of limitations of the app, namely distracting ads and limited mobile learning functionality, have also been identified.

Keywords: Quizlet, autonomous learning, English vocabulary

1. INTRODUCTION

1.1 Background of the study

Nowadays, students are referred to as "Digital Natives" since they are comfortable with technology, computers, and the Internet, as well as video games (Prensky, 2001). That has resulted in the necessity of applying information technology (IT) to teach and learn. In addition, technology has played an essential role in English teaching and learning for many countries in the world (Eady & Lockyer, 2013). It has been used to help teachers adjust to activities in class. Also, learners enhance the language learning process and improve their skills in a short time by utilizing technology and its services.

The learning of vocabulary is a critical element in enhancing knowledge and reading

CITATION | Nguyen, T. T., Nguyen, D. T., Nguyen, D. L. Q. K., Mai, H. H., Le, T. T. X., & Dao, N. A. D. (2020). Quizlet as a Tool for Enhancing Autonomous Learning of English Vocabulary. *AsiaCALL Online Journal, 13*(1), 150-165. DOI: https://doi.org/10.54855/acoj221319

comprehension of a second language (L2). Yet, this is perhaps the biggest challenge for many linguistic students because vocabulary knowledge involves a productive understanding of its many components, including the form, meaning, and application of the term (Nation, 2001). Thanks to the help of Quizlet, students may efficiently self-study vocabulary, resulting in significant vocabulary improvements (Thi & Satomi, 2021). Recently, to keep up with the trends and encourage students to approach IT, Vietnamese teachers have also recommended that students use Quizlet to acquire English vocabulary as a better way to learn English.

According to Rohmatillah research (2014), students faced a lot of difficulties when they learned vocabulary. It is hard to approach quickly in a short time because they have never discovered the drive and excitement to face the challenge of acquiring new English knowledge. Finding the most appropriate language education tactics and instruments for effective learning vocabulary is necessary. Van et al. (2021) identified that technology could help students learn English productively. Besides, knowledge also could learn from technology more easily if they took advantage of its usability.

For these reasons, this paper would give students the advantages of utilizing Quizlet in developing vocabulary acquisition, especially BUH Language freshmen and sophomores. It is necessary to give them insights into adopting the Quizlet trending learning method.

1.2 Research objectives

In this study, specific aspects of using Quizlet in vocabulary acquisition will be explored. Next, the study would figure out if the Quizlet application is helpful in assisting students in learning L2. Furthermore, we want to identify the difficulties which students can have when they use Quizlet.

1.3 Significance of the study

From the helpfulness and difficulties of using Quizlet in acquiring vocabulary and some data collected, we will assess the level of effectiveness when students apply Quizlet to learning. To sum up, all of the results in this research might help students, who major in the English language at Banking University, make the best of the benefits from Quizlet in boosting students' L2 learning motivation and autonomy.

1.4 Research question

To fulfill the purpose of the study, the survey sought to answer the following research questions:

How do the learners use Quizlet for vocabulary?

How effectively does Quizlet help learners with vocabulary?

What are the difficulties when learners use Quizlet?

2. LITERATURE REVIEW

2.1 General overview of Quizlet

According to Wright (2016), Quizlet is a digital flashcards platform that allows users to construct their flashcards and study them through various learning modes. It is one of the most popular flashcards programs, with over fifty million monthly users as well as over four hundred users--generated study sets (Matthew, 2019). Currently, with different types of learning modes, Quizlet gives the student interest in trying out various modes and provides them with 'richer ways' to study (Ravipati, 2017).

Table 1. Features of Quizlet

Features	Description	Mobile App
Learn	There are three types of tasks: Flashcard, multiple-choice item, and typing the required answer. Users can personalize this activity by selecting one of the three options.	Available
Flashcards	Users can create their flashcards. It could optionally be added self-explanation, audio,... Digital flashcards can be flipped by mouse clicks or tabs on screens to show definitions or visuals that illustrate the term.	Available
Spell	After listening to the audio prompts, learners are required to type the words correctly. If the word is spelled incorrectly, the correct answer will be read letter by letter while appearing on the scene.	Not available
Write	Users are given some space to write the definition or meaning of a word learned in ‘flashcards’ functions.	Available
Test	Four types of tests are included: true/false, multiple-choice, matching, and typing the answer. Learners can customize this activity.	Available
Match	Learners will join in a game that needs to match keywords to their definitions (or accompanying visuals) as rapidly as possible. When learners complete each question, the app will show the score and rank among other learners.	Available
Gravity	Another game in which the terms emerge on approaching asteroids. Before the falling asteroid hits the planet, students must type the corresponding definition of the term.	Not Available
Live	This is a feature that needs four or more people. Students will need to connect to http://quizlet.com/live and input the code provided by the teachers. Participating in the teacher's activity, students will have to team up to compete with the other group.	Not Available

2.2 The effectiveness of Quizlet in the acquisition of vocabulary

To begin with, motivation may be defined as combining both the desire for language acquisition and the desire to learn the language (Gardner, 1985, cited by Alizadeh, 2016). Many previous studies proved that Quizlet could create a motivation to arouse interest in learning from within students' consciousness. According to Rezaei et al. (2014), the mode of Quizlet activity method was an ideal medium for making students enjoy learning the words. It was indicated that students were motivated to acquire vocabulary when they applied it. Some of the interview's findings (Anjaniputra & Salsabila, 2018) have proved that Quizlet provided a new, enjoyable way of vocabulary learning for students due to various features of the application. Those aspects provided a fun experience for students to sense a new method of learning. In Skattenborg's research (2020), teachers thought Quizlet was effective when they utilized it appropriately. It was good for repetition, motivating pupils, and varying the lessons. Students also believed Quizlet was motivating and added variety to their learning process.

Besides motivation, another benefit of Quizlet is to promote active learning. Active learning consists of short course-related individual or small-group activities that all students in a class were called upon to do, alternating with instructor-led intervals (Felder & Brent, 2009). Thus, to learn vocabulary, only using a motivation to boost up oneself perhaps is not enough. According to many studies, more learners are interested in autonomous learning. These researches indicated that the Quizlet application gave learners the freedom to learn on their computers and cellphones (Vargas, 2011; Barr, 2016; Kálecký, 2016); students took advantage of benefit from the "spell section" to enhance their word spelling (Vargas, 2011; Kálecký, 2016) and students may focus their progress and discover where parts of their vocabulary were lacking (Kálecký, 2016). Furthermore, Korlu & Mede (2018) stated that Quizlet effectively helped the students' performance and made them more self-governing in learning vocabulary since the design of Quizlet was appropriate for autonomous learners. Setiawan & Wiedarti (2020) also demonstrated that students felt more enthusiastic, did not get bored, and showed a high level of interest when they could self-study vocabulary using the Quizlet application.

Next, Quizlet is effective in allowing the students to improve their achievement. Among various study modes available in Quizlet, Franciosi (2017) stated that game-based learning on Quizlet could significantly promote English vocabulary acquisition. The research outcome showed that many students held more optimistic views about using Quizlet game-based learning platform to build up their TOEIC vocabulary and exhibited considerably greater confidence in their TOEIC satisfactory test marks. On the other hand, Lees and Mcnee (2015) also indicated that students who utilized the Quizlet application were more motivated than those who did not. The overall score earned by the user of the application was much greater than that of the non-user. According to Chien (2015), students found online vocabulary websites, particularly Quizlet, stimulating and useful for vocabulary acquisition. Participants in his study also thought that utilizing Quizlet boosted their language knowledge. According to Korkealehto and Siklander (2018), who based their findings on students' diary entries and questionnaire replies, students thought Quizlet improved their writing and oral language skills. Similarly, Nguyen and Vo's

(2021) research participants also improved their language abilities by utilizing English learning applications like Quizlet.

Quizlet may greatly improve academic vocabulary acquisition. Students could find the learning experience to be more pleasant and beneficial, which motivated them to spend time studying on their own with Quizlet (Gilbert, 2016). In addition, Sanosi (2018) discovered that by using the Quizlet application via a smartphone, students might learn new words themself. In doing the assignments provided in Quizlet, both of the study's examinations showed that most students prefer to work independently and confidently with assignments given in the application on their own.

2.3 The challenges in using Quizlet

Although Quizlet was a highly rated vocabulary learning platform, at the same time, there were limitations in the user experience. Some of its features were only available on the website rather than in mobile apps (Dizon, 2016). Like Wikipedia, Quizlet permitted everyone to make and share a study set, so there was no assurance the data was exact. One grammatical mistake in another person's cards could lead them to consider some wrong data, miss inquiries on a test, and get a poor quality they did not anticipate getting (Bri, 2019).

Furthermore, some students appeared distracted while learning vocabulary and were occupied with different applications like Instagram and Facebook (Setiawan & Wiedarti, 2020). Besides, if students used Quizlet's free version, ads would be displayed on each website page (Bri, 2019). A few advertisements were barely noticeable; however, they could be oppressive. Thus, if students need the best taking-in experience from Quizlet, they should pay for extra administrations.

In short, this section helped to find out the interplay between Quizlet and autonomous student learning and some aspects that have not been clarified in previous research. The researchers explored that Quizlet created an attractive environment for students in the acquisition of vocabulary. It provided many functions for students to get hold of vocabulary and boost them to improve their motivation. Moreover, students were more interested in using game-based learning than the non-game approach. Furthermore, although they were distracted by other platforms, there was no denying the fact that Quizlet played a vital role in enhancing learners' autonomy. However, almost all of the studies only focused on one specific group of students, and non-comparison have been made among the different groups. Thus, the purpose of this study is to conduct the filling gaps by comparing the result between freshmen and sophomores. In addition, this research is to establish if Quizlet can increase the effectiveness of L2 vocabulary learning and assess the experiences of two groups.

3. METHODS

3.1 Pedagogical Setting & Participants

The research subjects included 100 Business English-major students in Banking University Ho Chi Minh City. The sample of this study was collected from 50 freshmen and 50 sophomores. All of the participants have experienced the English environment of the university. Most of the freshmen and sophomores were introduced to Quizlet by teachers. However, freshmen were new to it, while sophomores used it for a while. This difference helped the study assess how they apply Quizlet in learning vocabulary. Thus, the results collected from this sample can show the difference between freshmen and sophomores.

3.2 Design of the Study

This study employed the quantitative research method through the mixture of non-experimental and cross-sectional study designs. Due to the nature of the research, the questionnaire was posted on Facebook groups and collected answers from participants once. The frequency of usage and attitudes in utilizing the Quizlet application were investigated and performed a retrospective based on students' experiences.

The data collection tools were a questionnaire in Google Forms combining a 5-point Likert scale. The content of the questionnaire was based on the research questions in this study and some ideas from the questionnaire of Gilbert's research (2016). We modified and supplemented it to suit the reality of this study. The scale included 11 items related to the motivation and active learning factors affecting freshmen and sophomores' vocabulary learning habits. On a 5-point Likert scale, response options were presented: ranging from strongly disagree, disagree, not sure, agree, and strongly agree.

According to the characteristics of this study, quota sampling was applied because of the limited time for primary data collection. The procedure of collecting primary data lasted two weeks. It consisted of finding the general situation of students using Quizlet, creating a questionnaire, modifying it in line with the real situation, posting the official questionnaire on the Facebook forum to all of the participants, and receiving their responses in a week.

4. FINDINGS AND DISCUSSIONS

4.1. Research question 1: How do the learners use Quizlet for vocabulary?

4.1.1 time

Table 2.
The percentage of the Quizlet time usage in Freshmen and Sophomore year (%)

	Freshmen	**Sophomores**
Under 20 minutes each week	37.50	58.18
From 20 to 40 minutes each week	33.33	27.27
From 40 to 60 minutes each week	12.5	9.09
Above 60 minutes each week	16.67	5.46

Table 2 illustrates how much time students spent studying vocabulary on Quizlet outside of class. The majority of freshmen and sophomores did not use a considerable amount of time for Quizlet. Based on Figure 1, 37.5% of the freshmen and 58.2% of the sophomores spent less than 20 minutes each week. The percentage of sophomores increases by 20.7% percent more than freshmen. Notably, in the "20 to 40 minutes per week" and "40 to 60 minutes per week" average segments, the percentage of first-year students is also 6% higher than second-year students by 6% and 3.4%. In addition, a few of the students used more than one hour a week to study vocabulary, especially the sophomore (Freshman =16.7% and Sophomore= 5.5%).

These findings show that most of the students in this study used Quizlet as a support mechanism for vocabulary development in addition to traditional learning methods, which is similar to the results found by Burston (2014). To explain why first-year students spend more time than second-year students, Nakata (2006) demonstrated that freshmen want to increase their motivation to learn and achieve. Thus, they improved their learning experience and the extent to which they remember what they have learned. However, the percentage shows that students have not yet chosen Quizlet as a habit to learn every day. Besides, they may spend their time on other works outside class. The evidence is the decreasing number of freshmen and sophomores studying from 20 to 40 minutes, 40 to 60 minutes, and above 60 minutes per week. The reason for this was explained logically by Jogja English Teachers Association (2018). They also found some activities that make students have no time to learn outside class, such as doing assignments, part-time jobs, and doing house chores.

4.1.2 Function

Table 3.
The percentage of the Quizlet functions usage of Freshmen and Sophomores (%)

	Freshmen	**Sophomores**
Flashcards	33.33	37.08
Learn	20	16.85
Test	20	20.22
Spell	14.67	8.43
Match	9.33	14.5
Live	2.67	3.37

First, based on the data, the Flashcard rate is over 30%, but the Live rate is below 4%. In particular, the rate of Flashcard usage in the freshmen year is 33.33% and in the sophomore year is 37.1%, which is the highest percentage of Quizlet functions mentioned in the survey. In contrast, Live is the least chosen, with 2.7% in the freshman year and 3.4% in the sophomore year. Besides, there is a difference between the two research subjects in Match and Spell. First-year students like using Spell, but second-year students are interested in Match.

According to the survey, students are interested in Flashcards more than other functions. Flashcard allows students to create a new study set every time they like easily. Thus, the figures show freshman and sophomore students tend to set up flashcards to learn vocabulary because of their essential capability. In addition, the customization of Flashcards helps students learn vocabulary that is not only requested by teachers but also requested by themselves. That is true with Agung Ginanjar Anjaniputra & Vina Aini Salsabila analysis (2018) about the benefits of Flashcard. For the Live function, the reason why the lowest percentage in both years is that students must pay money to use it. Most of the time, students only use Live in the classroom when their teacher creates Live game-based and gives the code to participants. However, the specific explanation for this has not been discovered in previous studies yet.

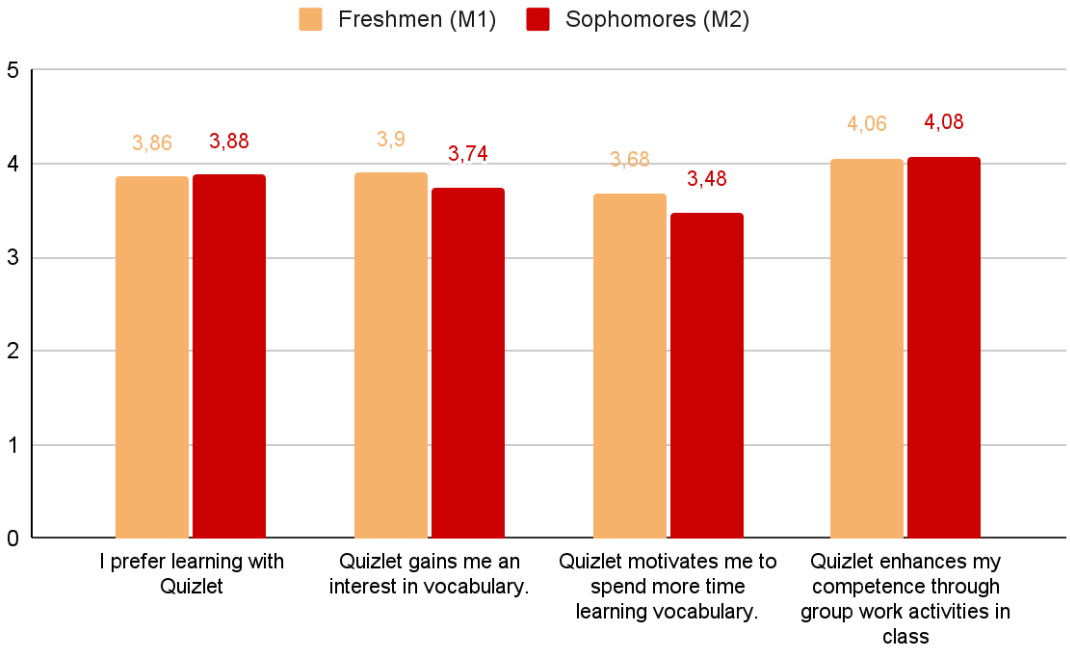
Finally, there is a difference between the percentage of students who use Match and Spell. Spell function is used more among freshmen students because they do not have specialized vocabulary background, even if they don't know those words before. When using Spell, Quizlet helps them practice pronunciation and memorize vocabulary quickly. Students only touch the screen and match possible words and meanings together regarding the Match function. This function is both easy to use and saves time in line with the point of view that Hougham (2019) demonstrated. Thus Match is more suitable for students with a vocabulary background as sophomore students.

Hence, from these findings, Quizlet functions can all help students acquire vocabulary effectively. Based on the results, most freshmen and sophomores tend to use Flashcards more than other functions because of the ease and convenience it brings.

4.2. Research question 2: How effectively does Quizlet help learners with vocabulary?

4.2.1 Motivation

Figure 1.
The mean value of students motivation in using Quizlet



Based on the survey, it is found that the lowest mean score of both groups was the same item (Quizlet motivates me to spend more time learning vocabulary). In detail, the mean value is quite the same (M1=3.68, M2=3.48), which is at a moderate level. It indicates that most of the freshmen and sophomores did not spend much time using Quizlet to learn vocabulary. However, it is found that the motivation which Quizlet has brought back can not be denied, which is shown through the other items.

The statement "Quizlet enhances my competence through group work activities in class" has the highest mean score from both groups (M1=4.06, M2=4.08). This can be considered that Quizlet is helpful in learning vocabulary and helps enhance students' learning performance and competitiveness, especially the Live function on the Quizlet application. Normal lessons in class will become more exciting with Quizlet digital games. In Forsythe's study (2016), he had applied Quizlet Live to his lessons and asked for the students' feedback. As expected, his students commented that they really enjoyed the game, and above all, Quizlet Live certainly helped them with vocabulary acquisition. Moreover, Quizlet Live can motivate students to consider autonomous study as a way to prepare for the game and, through that, increase the effectiveness of their classroom participation (Sophia, 2016).

In general, the mean score of the survey is at a moderate to high level of approval. (3<M<5). This somehow indicates the effectiveness of Quizlet on motivating vocabulary acquisition of

freshmen and sophomores at Banking University.

4.2.2 Active learning

Figure 2.
The means value of students' initiative in using Quizlet

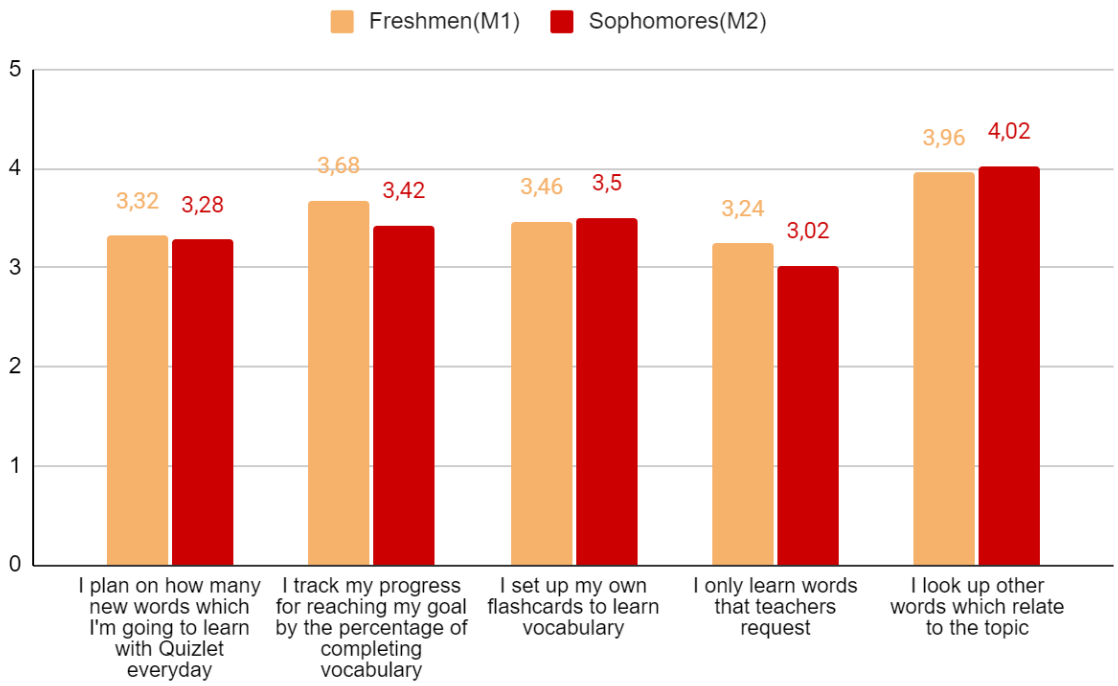


Figure 2 compares the mean values in terms of each criterion to clarify the freshmen and sophomore differences. In particular, the statement "Quizlet enhances my competence through group work activities in class" has the highest level of agreement with M1= 3.96 and M2 = 4.02. Based on Appendix 2, 82% of freshmen and 72% of sophomores tend to actively search for another vocabulary related to the lesson through the Quizlet app. The findings demonstrate the effect of Quizlet on students' learning, especially in increasing competitiveness. In addition, as the motivation section mentioned, freshmen and sophomores are motivated to get higher scores in competition in class, so both consciously enlarge their vocabulary to have plus-point in class. The findings are quite similar to Gilbert's (2016) research. Using Quizlet becomes a useful strategy to motivate studying L2 vocabulary, as shown by the important gains the students want to achieve on their scores. Although the percentage of sophomores looking up other new words is higher than that of freshmen, there is no big difference in this ratio.

Next, item two, "I track my progress for reaching my goal by the percentage of completing vocabulary," got the second-highest score with the exact means M1 = 3.68 and M2 = 3.42. This figure shows that students can detect how much they lack knowledge about that topic and have a direction to adjust their way of learning. Students are accustomed to using technologies in learning vocabulary, so applying Quizlet becomes an easy and exciting method. That has been

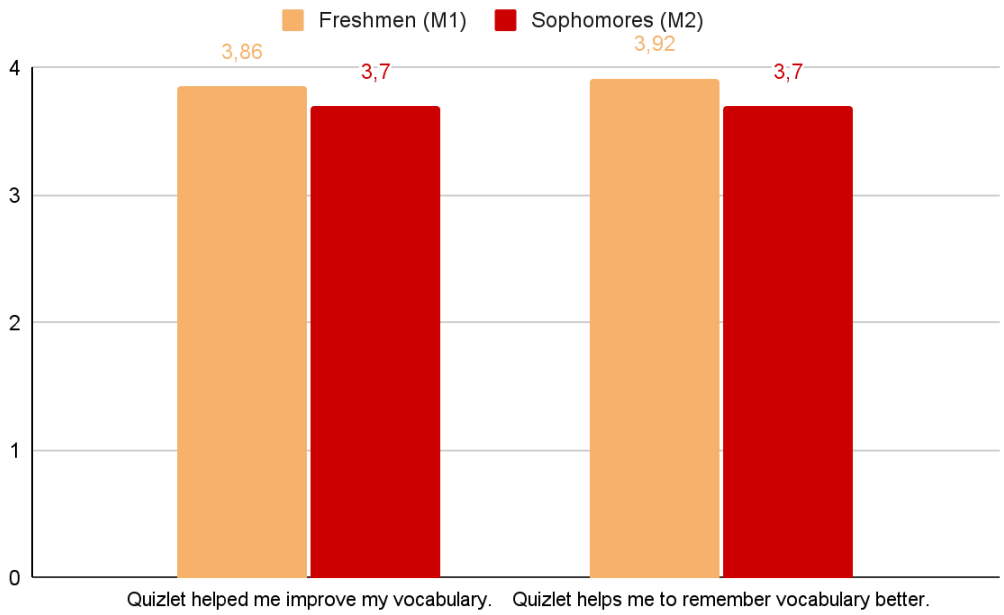
demonstrated in Kálecký's (2016) and Sanosi's (2018) study.

Moreover, thanks to the motivations and benefits that Quizlet provides, the freshmen and sophomore students viewed the use of Flashcards in acquiring vocabulary positively outside class. As Figure 2 mentioned, Flashcard is the most chosen function, so the mean results show that students were quite fond of creating flashcards with the value M1= 3.46 and M2= 3.5. It showed Flashcard as a way to promote and develop learner-centered learning environments. These results demonstrate that most of the students in this study made an effort to take advantage of the benefits of the Flashcard function to improve their memory and review vocabulary better. It is similar to the research shown by Burston (2014) and Taylor & Francis study (2020).

As a result, according to the results, it is clear that the students perceived Quizlet to be beneficial in terms of their L2 development. Most of the figures about the level of motivation and active learning show a concurrence trend. That proves that Quizlet creates a fun environment that motivates the freshmen and sophomore students in vocabulary acquisition. Thanks to those motivations, students are aware of the importance of expanding their knowledge and always actively spend time promoting self-study outside of class time.

4.2.3 Outcome

Figure 3.
The mean value of student's outcome after using Quizlet



According to the survey, both freshmen and sophomores have admitted that they can better memorize vocabulary with Quizlet. This has been demonstrated by the high level of approval of the two items "Quizlet helped me improve my vocabulary." (M1=3.86, M2=3.7) and "Quizlet helps me to remember vocabulary better." (M1=3.92, M2=3.7). This result can be explained by

various features of Quizlet, which provides an updated, enjoyable and effective way of vocabulary learning for students (Anjaniputra, 2018).

4.3. Research question 3: What are the difficulties when learners use Quizlet?

Although Quizlet is perceived as a good tool, there are still limitations and imperfections. When students were asked about difficulties in using Quizlet, the two most frequent answers were features limited in Quizlet mobile and being distracted by ads and social media. With more than 40% of choices from the sample, advertising and social media become a barrier to affect the freshmen and sophomore students. This finding indicates that it is difficult for them to turn off notifications from social networking applications or ignore promotional purchase ads from floating e-commerce platforms on the learning platform. This is the same with Setiawan & Wiedarti's study (2020) because it also demonstrates students can be quickly distracted when they study Quizlet vocabulary.

Furthermore, 33% of freshmen and 30% of sophomore students were also disappointed that the app offers fewer features on mobile. Eight learning modes are available in the website application interfaces. However, only five are offered in the mobile application interface (Sanosi, 2018). With this finding, students might have difficulty applying all the functions to learn vocabulary at the same time though the mobile phone is a useful device that can be brought everywhere.

The least selected difficulty is the information and knowledge containing errors (freshmen= 10% and sophomore= 9%). The percentage shows that vocabulary sets on Quizlet have good reliability. This is not the same view as Setiawan & Wiedarti's study (2020) that students may learn some of the incorrect or ambiguous word meanings. Although students can not be immune to the wrong learning materials, this only happens with self-study students. Thus, students could access materials that their teachers have prepared on Quizlet.

In the second-year survey, there are two other difficulties mentioned. "Quizlet does not have strict rules to use its features well" and "Create vocabulary cards with sounds for extra money." However, the main reason that hinders the learning process of the freshmen and sophomore students is being distracted by pop-up ads, social networks, and limited mobile learning functionality. To sum up, students need to practice self-control or set study times to control distractions. Besides, students can spend time learning on the computer to use the Quizlet functions fully, and signing up for Quizlet Go is a way to handle annoying ads on this application.

Table 4.
The percentage of difficulties in using Quizlet

Items	Freshmen	Sophomores
Distracted by ads or social media (Facebook, Instagram...)	42%	41%
Quizlet mobile does not have some features as on the website	33%	30%
Limitation in providing learning information materials	15%	17%
Definitions of some words are inaccurate	10%	9%
Others	0 %	3%*

** Others: "Quizlet does not have strict rules to use its features well."*
"Create vocabulary cards with sounds for extra money."

5. CONCLUSION

Based on the finding, Quizlet could help students improve their vocabulary so that they can have enough motivation and have an interest in vocabulary learning. Besides, it becomes an effective application for them by assisting students in approaching new words or assessing their learning progress. However, some limitations need to be solved, such as the less usage time of students each week, distracting ads and social media, or some paid functions.

From these problems, the authors of this research can put forward some potential solutions for schools, lecturers, and students. School directors expressed that they indicated quite high intentions to assist lectures and non-commercial activities of their students and teachers (Geuens, De Pelsmacker & Mast, 2002). Thus, by sponsoring Quizlet packages or purchasing sharable accounts, schools can help many students approach Quizlet functions. Full access to Quizlet Plus might pique students' curiosity and interest. It might encourage them to use and experience. Students would enjoy and desire the study method of Quizlet. Next, lecturers should have more recommendations about Quizlet or give students homework on Quizlet. This way, students can effectively exploit the benefits of Quizlet and increase time for study (Gilbert 2016). Due to the interest and support from school and lecturers for students to effectively exploit the benefits of Quizlet and increase time for study, this habit would increase the time students actively learn vocabulary and improve their English skills. Students who have good study habits will know how to build their learning plan and self-study as they devised (Julius & Evans, 2015).

Although this study revealed positive results, it is not without its shortcomings. First, because of the impact of the pandemic, the survey had to collect samples online and was limited to 100 English first year and second-year students. This limitation made the results less general. Also, this study focused on students who major in the English language at Banking University Ho Chi Minh City, so these results cannot be applied to students of any majors or schools. Lastly, it would be interesting if a future study looked at the differences between general vocabulary and specific vocabulary; consequently, the results only indicated the Quizlet effectiveness to

general vocabulary. It would be worthwhile if future studies compare this difference and expand the research object to get more data for further analysis on vocabulary acquisition.

ACKNOWLEDGEMENT

We deeply appreciate the insightful comments of Ms. Dao Nguyen Anh Duc – our mentor and lecturer of the Faculty of Foreign Languages of Banking University, Ho Chi Minh City, on our earliest drafts and whole study. And we wish to thank her support during the process of our work and participation in the conference.

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Biodata

Nguyen Thanh Thuy is currently a junior of Business English at Banking University of Ho Chi Minh City, Vietnam. Her field of interest is English learning methods, so she chose the topic related to IT application in English learning to present at the conference. This is a great opportunity for her to learn new things and experiment through this event.

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AsiaCALL Online Journal
ISSN 1936-9859; https://asiacall.info/acoj
Vol. 13, No.1, 2022
pp. 166-179

Received: 28/10/2021
Revision: 27/12/2021
Accepted: 29/12/2021
Online: 01/01/2022

On the Shift of Parts of Speech in Prepositional Meaning in English-Vietnamese Translation

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https://doi.org/10.54855/acoj.2213110

Abstract

Exploring the shift in meanings of translating prepositions from English to Vietnamese, the study, besides analyzing the cases of the changes in meanings of prepositions, aims to discuss a general variety of meanings of English prepositions. The methods of analysis and synthesis of theories from the available data on prepositions as well as the methods of classifying and systematizing prepositions were applied to English-Vietnamese translation. From the collected data, this study has revealed 6 cases of the shift in meanings of prepositions and the characteristics of multiple meanings of prepositions. In the course of translation, contextual meanings are used in order to convey the meanings appropriately in the Vietnamese style. The research paper can make some contribution to the teaching of translation and make it a reference material for English learners.

Keywords: *prepositions, translation, English, Vietnamese, the shift in meanings, multi-meaning*

1. Introduction

Prepositions in English have some similarities with those in Vietnamese. However, there are cases where prepositions are used differently between two languages, especially in different contexts, leading to different meanings in translation. The phenomenon of changing the meaning of prepositions when translating from English to Vietnamese sometimes confuses translators due to the habit of translating from Vietnamese to English in a single sense, making language expressions unnatural and difficult to understand. Flexibility when translating prepositions will help translators convey the content of the translation accurately, avoiding translation errors about prepositions.

Therefore, the correct use of prepositions is very important because people use them to indicate the action and details of what people are going to convey. Understanding prepositions not only helps to use English naturally but also helps to translate documents and texts correctly *(The Key to English Prepositions 1, Collier-Macmillan International, 1964).* However, many learners in Vietnam find it difficult to translate prepositions correctly in many different contexts.

In addition, English learners often tend to translate languages according to their mother tongue. Therefore, they need to realize that there is no such thing as translating an exact preposition in

CITATION | Dinh, D. P. (2022). On the Shift of Parts of Speech in Prepositional Meaning in English-Vietnamese Translation. *AsiaCALL Online Journal, 13*(1), 166-179. DOI: https://doi.org/10.54855/acoj.2213110

a single sense from English to Vietnamese and vice versa. We know that sometimes we have to add or subtract prepositions when translating a sentence from one language to another. Moreover, Vietnamese prepositions would have some meanings similar to English, so the translation of prepositions needs to be carefully guided for learners so that they can recognize this problem and know the appropriate prepositions to use in different situations to avoid errors when using.

In short, to use English prepositions when translating from English to Vietnamese correctly, learners need to know the phenomena of prepositional meaning change when translating from English to Vietnamese, as well as the phenomenon of multiple meanings of a preposition in different contexts. There are no universal rules for using prepositions, and learners should not directly translate prepositions into their native language since prepositions are used differently in different languages. As mentioned above, it is very necessary to study the phenomenon of prepositions when translating from English to Vietnamese.

2. Literature review

a) Domestic research

In Vietnam, there are topics related to prepositions such as:

- Tran, V. D. (1997). *Cách dùng giới từ Anh ngữ*, Nhà Xuất bản Thành phố Hồ Chí Minh.
- Tran, Q. H. (2001). *Nghiên cứu giới từ định vị theo hướng ngữ dụng trên cứ liệu tiếng Anh và tiếng Việt*, Master Thesis of Science in Literature, University of Social Sciences and Humanities – Hanoi National University.
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- Nguyen, T. T. H. (2020), *Giới từ định vị tiếng Anh (at, in, on) và các đơn vị tương đương trong tiếng Việt*, Doctoral Thesis, University of Social Sciences and Humanities – Ho Chi Minh City National University.

b) International research

In countries around the world, there are materials related to prepositions such as:

- Collier-Macmillan International (1964) – *The Key to English Prepositions 1,* Collier-Macmillan Limited, London, v.
- Seth Lindstromberg (2010) – *English Prepositions Explained,* Amsterdam: John Benjamins Publishing Company.
- Tom Hutch (2015) - *150 Everyday Uses of Prepositions in English*, Learning Express.
- Jean Yates (2020) - *Barron's ESL Proficiency Series: Prepositions,* Kaplan, Inc., Barron's Educational Series.

Researches and works related to prepositions mentioned above, whether in the domestic or foreign scope, have partly provided useful content and materials for students who want to learn about prepositions. As Tran (1997) showed that prepositions could follow verbs, adjectives, and nouns and would perform different functions, and at the same time shows the general pattern of prepositional meaning in English – Vietnamese translation. The Ph.D. thesis of Tran (2001) identified the pragmatic factors affecting the choice of locative prepositions. The Ph.D. thesis of Nguyen (2001) has shown the comparison of English and Vietnamese prepositions in terms of grammatical characteristics so that it can be applied to the analysis of errors of Vietnamese people when learning English prepositions. The Ph.D. thesis of Nguyen (2020) analyzed the phenomenon of multi-meaning of the English preposition "in" from the perspective of cognitive linguistics. The Ph.D. thesis of Nguyen (2020) showed the locating prepositions of "at, in, on" in English and equivalent meanings in Vietnamese in terms of grammar and semantics.

There are also documents and books that focus on the use of prepositions. Collier-Macmillan International (1964) – *The Key to English Prepositions 1* also classified each group of prepositions used for different functions such as time, position, measure, number, etc. Thereby, each preposition, when going with nouns, will give different meanings. Seth Lindstromberg (2010) – *English Prepositions Explained* classified prepositions used in different meanings and functions in each specific case. At the same time, he also grouped prepositions that have the same meaning but will be different in each context. Tom Hutch (2015) - *150 Everyday Uses of Prepositions in English* listed common prepositions used in everyday life and Jean Yates (2020) - *Barron's ESL Proficiency Series: Prepositions* listed each prepositions' meaning in contexts.

However, the above studies and documents are only generalizations, or they provide research results in certain aspects. There has not been any in-depth research on the phenomenon of prepositions in English to Vietnamese translation. In other words, there have not been any deep studies of how an English preposition will have different meanings in different contexts. Therefore, this study would analyze the phenomenon of transfer meaning between English-Vietnamese prepositions with the desire to clarify the phenomenon of meaning transference of prepositions in sentences, one of the difficulties for English learners.

2.1 Research Questions

To fulfil the purpose of the study, the survey was to answer the following research questions:

a. How many transitions of prepositions are there when translating from English to Vietnamese?

b. Does the phenomenon of polysemy appear in the same preposition in addition to its original meaning in different contexts?

3. Methods

3.1 Data

Researching prepositions in English (focusing on common prepositions that learners often think of first when asked about prepositions in English such *as at, in, on, for, from, to, above, before, without,* and so on) and comparing equivalent meanings in Vietnamese such as *ở, trong, trên, cho, từ, tới, trên, trước, mà không, …*)

3.2 Design of the Study

The study used the following methods. Firstly, the writer uses the comparative and contrastive method to research the similarities and differences between English and Vietnamese prepositions. Secondly, the writer uses the analyzing and synthesizing theory method to study documents about prepositions in English and look for examples of sentences using prepositions in texts to serve as illustrative examples. Finally, the writer uses the classification and systematization of theory method to distinguish each phenomenon of prepositional meaning transition when translating from English to Vietnamese.

This study would examine and analyze each phenomenon of prepositional meaning change when translating from English to Vietnamese. In translated sentences, the author will try to convey the exact meaning of the sentences in certain contexts.

3.3 Data collection & analysis

The study focused on English-Vietnamese prepositions and the phenomenon of prepositional meaning change when translating from English to Vietnamese. Data and examples were taken from 5 sources, including *150 Everyday Uses of Prepositions in English* by Tom Hutch, *Barron's ESL Proficiency Series: Prepositions* by Jean Yates, *Cách dùng giới từ Anh ngữ* by Tran Van Dien, *English Prepositions Explained* by Seth Lindstromberg and *The Key to English Preopistions 1* by Collier-Macmillan International. All documents are original, and the author would select a few examples that use prepositions used in everyday language to show the difference in meaning in each language when translated.

4. Results

4.1 Prepositions are present in English but not in Vietnamese

Take the verb ***wait***, in English, if we use this verb with the purpose of waiting for someone, it would be:

(1) *I will **wait for** you till 5 o'clock.* (Tran, 1997, 10)
(2) *I have **waited for** you from the morning till now.* (Tran, 1997, 13)

However, if translated into Vietnamese according to the Vietnamese speaking style, the two sentences above will give the following meaning:

(1) *Tôi sẽ **chờ bạn** tới 5 giờ.*
(2) *Tôi đã **chờ bạn** từ sáng cho tới bây giờ.*

Next is the verb ***arrive***, in English if we use this verb to talk about going somewhere, it will be:

(3) *He **arrives at** Dallat.* (Tran, 1997, 12)
(4) *We **arrive in** Saigon.* (Tran, 1997, 22)

When translated into Vietnamese according to the Vietnamese style, the two sentences above will give the following meaning:

(3) *Anh ta **tới** Đà Lạt.*
(4) *Chúng tôi **tới** Saigon.*

We will not translate that:

~~*(3) Anh ta **tới ở** Đà Lạt.*~~

~~*(4) Chúng tôi **tới trong** Saigon.*~~

4.2 Prepositions are not present in English but are present in Vietnamese.

Take the case of the verb ***contact***, in English, if we use this verb for the purpose of communicating between people, it would be:

(5) *They **contacted** me about my trip.* (Yates, 2020, 20)
(6) *You can **contact** him by e-mail.* (Yates, 2020, 48)

However, if translated into Vietnamese according to the Vietnamese speaking style, the two sentences above will give the following meaning:

(5) *Họ **liên lạc với** tôi về chuyến đi.*
(6) *Bạn có thể **liên lạc với** anh ta qua địa chỉ e-mail.*

Take another case of the verb ***enter***, in English, we use this verb to talk about where to go inside, then we will use:

(7) *When the president **entered** the room, everyone stood up.* (Yates, 2020, 215)
(8) *He **enters** my room.* (Tran, 1997, 12)

When translated into Vietnamese, the two sentences above will give the following meaning:

(7) *Khi chủ tịch **vào trong** căn phòng, mọi người đều đứng dậy.*
(8) *Anh ta **vào trong** phòng tôi.*

The most common causes of this change of meaning are often in the form of sentences of ditransitive verbs:

S + ditransitive verbs + indirect object + direct object

(9) *She **bought** him a present.*
(10) *Cong Phuong **passed** Quang Hai the ball.*

With the above sentences, we will often translate as:

*(9) Cô ta **mua cho** anh ấy một món quà.*
*(10) Công Phượng **chuyền banh cho** Quang Hải.*

4.3 Prepositions are present in both English and Vietnamese

Take the verb ***disagree***, in English, if we use this verb for the purpose of expressing an opinion, it would be:

*(11) Whatever I say, she always **disagrees with** me.* (Hutch, 2015, 43)
*(12) ... I sort of **disagreeing with** them.* (Hutch, 2015, 57)

If translated into Vietnamese according to the Vietnamese speaking style, the two sentences above will give the following meaning:

*(11) Tôi có nói gì, cô ấy luôn luôn **không đồng ý với** tôi.*
*(12) ... tôi kiểu như **không đồng tình với** họ.*

Take the verb phrase ***talk about***, in English, when we use it to express what we mean about something, we will use:

*(13) He often **talks about** his job.* (Yates, 2020, 19)
*(14) He **talked about** you.* (Tran, 1997, 15)

If translated according to the Vietnamese style, we would say:

*(13) Anh ta thường **nói về** công việc của mình.*
*(14) Anh ta **đã nói về** bạn.*

4.4 Prepositions are present in both English and Vietnamese but different prepositions are used

Take the phrase ***be famous for,*** in English, we use to refer to a thing/situation that is famous, then we will have the following sentences:

*(15) Da Lat is a city **famous for** its climate.* (Tran, 1997, 145)
*(16) She is **famous for** giving great parties.* (Yates, 2020, 91)

If translated according to the Vietnamese style, we would say:

*(15) Đà Lạt là một thành phố nổi tiếng **về** khí hậu tốt.*
*(16) Cô ấy nổi tiếng **về** việc tổ chức các bữa tiệc tuyệt vời.*

When translating into Vietnamese, English will still use the preposition ***for***. Meanwhile, the Vietnamese will use the preposition ***about (về)***. Therefore, we will use the wrong preposition if translating in normal Vietnamese:

~~*(15) Da Lat is a city **famous** for its climate.*~~

~~*(16) She is **famous about** giving great parties.*~~

Next is the verb ***remind***, in English, if we use it to talk about reminding someone of/about something, we will use it with the preposition of according to the structure:

to remind somebody of someone/something

*(17) She **reminds** me **of** my sister.* (Yates, 2020, 260)
*(18) The purple color **reminds** me **of** her.* (Tran, 1997, 92)

In this case, when translating into Vietnamese, we will translate it as:

*(17) Cô ấy làm tôi **nhớ tới/về** chị gái của tôi.*
*(18) Màu tím làm tôi **nhớ tới/về** cô ấy.*

Therefore, we will use the wrong preposition if translating in normal Vietnamese:

~~*(17) She **reminds** me **to/about** my sister.*~~

~~*(18)The purple color **reminds** me **to/about** her.*~~

4.5 Prepositions are not present in both English and Vietnamese

In this case of translation, in English and Vietnamese sentences, they both describe common actions.

*(19) I am **awaiting** your visit with pleasure.* (Yates, 2020, 199)
*(20) I was inspired by that film to **become** a fireman.* (Hutch, 2015, 2020)
*(21) After **reading** this article three times, I still don't understand it.* (Yates, 2020, 30)

Translated into Vietnamese, the above sentences will give the meaning:

*(19) Tôi **đang trông đợi** chyến thăm của bạn với niềm vui mừng.*
*(20) Bộ phim truyền cảm hứng cho tôi để **trở thành** lính cứu hỏa.*
*(21) Sau khi **đọc** bài báo này ba lần, tôi vẫn không hiểu nó.*

With ***become*** and ***read,*** there will never be a preposition followed if translated into Vietnamese:

~~*(20) I was inspired by that film to **become into** a fireman.*~~

~~*(21) After **reading about** this article three times, I still don't understand it.*~~

4.6 Prepositions are present in English, when translated into Vietnamese, they act as conjunctions or verbs

In some cases, when translating an English to Vietnamese preposition in a sentence, we will see that the meaning of the preposition now has the meaning of conjunction or verb. Examples of the following sentences with the preposition ***with:***

***a) With** in the meaning of conjunction:*

*(22) **With (In case of)** problems of this sort, you have got to think in terms of five- or ten-year periods.* (Lindstromberg, 2010, 219)
*(22) **Trong trường hợp của** những vấn thuộc loại này, bạn phải nghĩ vê khoảng thời gian năm hoặc mười năm*
*(23) The flower is wet **with (because of)** dew.* (Tran, 1997, 16)

(23) *Những bông hoa bị ướt **bởi** sương sớm.*
(24) *The girl's face is wet **with (because of)** tears.* (Yates, 2020, 224)
(24) *Khuôn mặt của cô gái ướt **vì** nước mắt.*
(25) *I love him **with (despite)** all his faults.* (Yates, 2020, 225)
(25) *Tôi yêu anh ấy **bất chấp** tất cả những lỗi lầm của ảnh.*
(26) ***With (Despite)** all her problems, she is quite serene.* (Yates, 2020, 225)
(26) ***Bất chấp** mọi vấn đề của mình, cô ấy vẫn khá thanh thản.*

b) *With in the meaning of verb:*

(27) *The man **with (who has)** brown eyes is my father.* (Tran, 1997, 15)
(27) *Người đàn ông **có** đôi mắt màu nâu là cha tôi.*
(28) *I am **with (agree)** you on that point.* (Tran, 1997, 15)
(28) *Tôi **đồng ý với** bạn ở điểm đó.*
(29) *I have an article **with (that contains)** pictures for my presentation.*
(30) (Yates, 2020, 219)
(29) *Tôi có một bài báo **chứa** những bức ảnh cho bài thuyết trình của mình.*

Another case of the preposition ***against,** in the meaning of verb:*

(30) *They held the mirror **against (touch)** the wall.* (Yates, 2020, 33)
(30) *Họ giữ gương **dựa** vào tường.*
(31) *He is always **against (disagree)** me.* (Tran, 1997, 16)
(31) *Anh ta luôn **chống đối** tôi.* (Tran, 1997, 16)

When placed in different contexts, the original meaning will be lost and give different meanings similar to Vietnamese. This phenomenon occurs due to elements of Vietnamese culture. At this point, the meaning of the two sides will no longer be equivalent to each other in the original sense. There will be many other meanings in the same preposition, and the study will only generalize to show that the phenomenon of multiple meanings of prepositions in the context is present.

Now, the study will focus on the preposition ***on**,* one of the most commonly used prepositions in both English and Vietnamese prepositions to show the phenomenon of multi-meaning of prepositions when translating from English to Vietnamese.

(1) ***on,*** in its original sense, is often translated by Vietnamese as ***trên:***

(32) *The newspaper is **on** the table.* (Yates, 2020, 149)
(32) *Tờ báo **ở trên** bàn.*
(33) *There are a lot of movies **on** television.* (Yates, 2020, 159)
(33) *Có rất nhiều bộ phim **trên** TV.*

(2) ***on*** can be translated as ***ở*** in Vietnamese:

(34) *Please open your book **on** page one* (Yates, 2020, 150)
(34) *Hãy mở sách của bạn ra **ở** trang một.*
(35) *I live **on** the fourth floor …* (Tran, 1997, 23)

(35) *Tôi sống **ở** tầng bốn …*
(36) *I am with you **on** that point.* (Tran, 1997, 15)
(36) *Tôi đồng ý với bạn **ở** điểm đó.*

(3) ***on*** can be translated as ***vào*** in Vietnamese:

(37) *Come and see me **on** Mondays.* (Tran, 1997, 10)
(37) *Hãy đến và gặp tôi **vào** thứ hai.*
(38) *He vistis twice a month on weekends.* (Yates, 2020, 153)
(38) *Anh ta viếng thăm hai lần một tháng **vào** các ngày cuối tuần.*

(4) ***on*** can be translated as ***bằng*** in Vietnamese:

(39) *He came over **on** his bike.* (Yates, 2020, 151)
(39) *Anh ta ghé chơi **bằng** xe đẹp.*
(40) *George usually goes to work **on** the bus.* (Macmilland, 1968, 15)
(40) *George thường đi làm **bằng** xe buýt …*
(41) *That car runs **on** diesel fuel.* (Yates, 2020, 153)
(41) *Chiếc xe hơi đó chạy **bằng** dầu đi-e-zel.*
(42) *He wrote his paper **on** the computer*. (Yates, 2020, 154)
(42) *Anh ta viết bài **bằng** máy tính.*

(5) ***on*** can be translated as ***về*** in Vietnamese:

(43) *He gave me a lecture **on** science.* (Tran, 1997, 15)
(43) *Anh ấy giảng cho tôi **về** khoa học.*
(44) *We have a good book **on** gardening.* (Yates, 2020, 155)
(44) *Chúng tôi có một cuốn sách **về** làm vườn.*

(6) ***on*** can be translated as ***bên*** in Vietnamese:

(45) *The porch is **on the side** of the house.* (Yates, 2020, 150)
(45) *Mái hiên **bên hông** nhà.*
(46) *Did you notice the twin oak trees **on the left hand side** of the path?* (Lindstromberg, 2010: 58)
(46) *Bạn có để ý thấy đôi cây sồi **bên tay trái** của lối đi không?*

(7) ***on*** can be translated as ***đối diện*** in Vietnamese:

(47) *Their house is **on the beach**.* (Yates, 2020, 150)
(47) *Nhà của họ **đối diện bãi biển.***
(48) *Both of these campgrounds are **right on the ocean.*** (Lindstrormberg, 2010, 52)
(48) *Cả hai khu cắm trại đều **đối diện ngay bãi biển.***

(8) ***on*** can be translated as ***trong*** in Vietnamese:

(49) *She is **on** the basketball team …* (Yates, 2020, 156)
(49) *Cô ta **trong** đội bóng rổ …*

(9) ***on*** can be translated as ***lên*** in Vietnamese:

*(50) She poured water **on** the plant. (*Yates, 2020, 151)
*(51) Cô ta tưới nước **lên** cái cây.*
*(52) He sprinkled salt **on** the meat. (*Yates, 2020, 151)
*(51) Anh ấy rắc muối **lên** miếng thịt.*

(10) ***on*** can be translated as ***khi*** in Vietnamese:

*(52) She fainted **on** hearing the news.* (Yates, 2020, 159)
*(52) Cô ấy ngất **khi** nghe thông tin.*
*(53) **On** hearing the victory, people were transported with joy*. (Tran, 1997, 180)
*(53) **Khi** nghe tin chiến thắng, dân chúng xiết nỗi vui mừng.*

(11) ***on*** can be translated as ***với*** in Vietnamese:

*(54) The teacher is much too easy **on** the boys.* (Yates, 2020, 160)
*(54) Người giáo viên quá dễ dãi **với** những học sinh nam.*
*(55) I think I was too rough **on** her yesterday.* (Yates, 2020, 160)
*(55) Tôi nghĩ tôi đã quá khắt khe **với** cô ta ngày hôm qua.*

In addition to the above cases, the preposition ***on*** has other meanings in English expressions but does not carry the prepositional meaning when translated into Vietnamese. In this case, the translator will use Vietnamese expressions with similar meanings to express the meaning of ***on*** in the sentence. For example:

*(56) They were **on the road** for two days during their trip. (*Macmillan, 1964, 3)
*(56) Họ đã **đi được** 2 ngày trong suốt chuyến đi.*
*(57) The light's **on**.* (Lindstromberg, 2010, 65)
*(57) Đèn **đang bật***
*(58) The meeting's **on**.* (vs off) (Lindstromberg, 2010, 65)
*(58) Cuộc họp **đang diễn ra.***
*(59) He is always **on hand** to help us.* (Yates, 2020, 158)
*(59) Anh ta luôn **có mặt** để giúp chúng tôi.*
*(60) She is **on a diet**.* (Yates, 2020, 158)
*(60) Cô ta **đang ăn kiêng.***

Through analyzing the preposition ***on*** in the above contexts, the author has pointed out **11 different meanings** of the preposition **"on"** when placed in different contexts and the exception when it is a fixed phrase, resulting in similar meanings to Vietnamese when translated.

5. Conclusion and Discussion

Summarising

The research has answered two questions raised by referencing documents on English and Vietnamese prepositions as a basis for research and surveying cases of prepositional transitions when translating from English to Vietnamese. Specifically, how many phenomena will occur when we translate English prepositions into Vietnamese and whether an English preposition can have many meanings other than the original meaning when placed in different contexts.

The study shows that there are **6 cases** of transition of prepositions when translating from English to Vietnamese. Cases showing the similarities and differences of prepositions in each different language will have different usage, thereby drawing the conclusion that prepositions are arbitrary and do not have a prepositional using method. There will be cases where prepositions are present in both English and Vietnamese, and they have the same meaning when translated. There will be cases where prepositions are added or omitted, or both have the same meaning, but the preposition is used differently, and there are cases where there are no prepositions in sentences to describe actions.

The study also shows that in translation, learners or translators need to look closely at the phenomena of translation in order to be able to convey the correct meaning and use the correct prepositions. Moreover, the study also shows that when considering the cultural factor of the language to be translated, it will give different meanings in one preposition. To clarify, the preposition ***on*** can be translated in many meanings similar to other prepositions in Vietnamese and other expressions in addition to the original meaning ***trên***, including other **10 meanings: *ở, vào, bằng, về, bên, đối diện, trong, lên, khi, với.***

The findings in this paper provide the basis for people to see that prepositions are one of the important aspects of English. Understanding and using correct prepositions will help us express our ideas through language and express it naturally. According to Tran (1997), “learning the form and meaning of prepositions is not enough. What matters is learning how to use prepositions in different situations.” The study also shows that the proficient use of English prepositions does not have a uniform rule, but it takes practice and habits to become proficient. Prepositions are diverse and always change meaning when placed in different contexts. Therefore, there is no method of using prepositions.

According to Nguyen (2001), in both English and Vietnamese, linguists classify prepositions into functional words, linking words, empty words, etc. Prepositions have an important position in the word system. Type, it has the ability to connect, showing the relationship between the elements in the sentence that they link. Moreover, it is necessary to distinguish prepositions from conjunctions in both English and Vietnamese. Conjunctions are words that show an equality relationship, and prepositions represent a main-subordinate relationship. In English, prepositions also need to be distinguished from minor adverbs. Sub-adverbs differ from prepositions in terms of syntactic and grammatical features.

In both English and Vietnamese sentences, a preposition always precedes the noun or pronoun that it governs to form a prepositional phrase (preposition). Prepositions in both languages can be used at the beginning of a complex sentence with a clause to indicate different meanings in translation, such as purpose, cause, and effect.

In conclusion, the study hopes to have partly contributed to the identification of the meaning of English prepositions in learning and translation. Therefore, the research paper hopes to be useful to English learners and individuals who are passionate about teaching aspects of the language, especially prepositions.

Limitations

The study is only a small contribution to the study of English prepositions by analyzing some transitional phenomena and briefly mentioning that a preposition can have many meanings and play different roles in the English language. In other words, there will be many phenomena that change the meaning of prepositions and the phenomenon of multiple meanings of each preposition that within the scope of this research paper will not be able to cover all of them.

According to Nguyen (2001), from the analysis of the prepositional systems of English and Vietnamese, we can see that the prepositional systems in both languages have diversity and rich activities. The English preposition system is considered difficult to use for Vietnamese learners because of the habit of translating the language directly from the mother tongue, and the meaning and usage of the preposition system are sometimes different from that of Vietnamese. Moreover, the differences in respective structures and spatial and temporal perception of the British and Vietnamese are often not the same.

The author also agrees with the point of view of Nguyen (2001), that teaching and learning English prepositions should not be separated from each other but should be taught and integrated into the process of grammar teaching and communication knowledge. In addition to the theory in class, learners need to practice in class to be able to remember the taught prepositions and use them correctly. First, they need to understand the nature of prepositions between English and Vietnamese, then gradually apply them through small exercises, then progress to the exercises of compounding sentences and completing sentences. In addition, the role of the mother tongue needs to go hand in hand with learning English. Secba (1979), in the book "On foreign language teaching methods," said: "Experience has shown that it is impossible to give up the mother tongue in the process of learning a foreign language, but it is impossible to remove the mother tongue from the students' minds obtainable" (213).

Discussion

In addition, the study suggests that in teaching translation, especially prepositions, teachers should pay attention to making learners understand that preposition translation should not be translated directly in their own language. They must rely on context and semantics in linguistics. Teachers also need to help learners limit the habit of translating everything into their native language, especially prepositions, because the case of a preposition with multiple meanings

does occur. Furthermore, based on cultural differences and habits of using prepositions in different languages, teachers should also understand clearly so that they can help learners reduce mistakes when using prepositions. During the teaching process, the teacher should:

- Analyzing the phenomenon of meaning change of prepositions when translating from English to Vietnamese in translation so that learners can accurately translate the meaning of sentences.
- Analyzing the case of multiple meanings of prepositions in translation that, in addition to common meanings, can have other meanings in different contexts.
- Analyzing other roles of prepositions in sentences, which can be verbs or conjunctions.

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Biodata

As an excellent student at Sai Gon University, Phat Dinh Dac has won a championship in an annual contest "The Winner" and conducted a scientific research at the university level. He will be able to get more achievements when he has been exposed to scholarly atmosphere like the one created by this Conference.

AsiaCALL Online Journal (acoj)

ISSN: 1936-9859

Vol. 13 No. 1 (2022): January 2022, Volume 13, Issue 1

Publisher: Asia Association of Computer-Assisted language Learning

Address: Faculty of Foreign Languages - Van Lang University, 45 Nguyen Khac Nhu, Dist. 1. Ho Chi Minh City, Vietnam

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