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There are 254 authors/ delegates from 18 different countries, such as Nepal (2), Malaysia (16), China (3), South Korea (1), Bangladesh (5), Morocco (3), Philippines (35), Ethiopia (6), Germany (1), Bosnia Herzegovina (1), India (6), Japan (2), Australia (1), Pakistan (2), Russia (1), Saudi Arabia (1), The United State (1), and Vietnam (178). In terms of full paper publications, many papers have been selected to be considered for publication in the Proceedings of Atlantis Press, part of Springer Nature, some papers were published in the AsiaCALL Online Journal (ISSN: 1936-9859), some papers were published in the Proceedings of the AsiaCALL International Conference (ISSN: 2833-6836, ISBN: 979-8-9870112-1-8), some papers have been considered for publications in the International Journal of TESOL & Education (ISSN: 2768-4563), and International Journal of Language Instruction (ISSN: 2833-230X)

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Analyzing the Regular Grammar Mistakes of Chinese Students While Assessing Speaking During an IELTS Speaking Test

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ABSTRACT

Keywords: IELTS speaking test; Grammar mistakes; Analysis; Chinese University Students

This research was done to determine the validity and dependability of the IELTS speaking test questions received by the four Chinese applicants, as well as the total number of grammatical errors committed by the four candidates and the frequency with which each error occurred. The research included a reasonably in-depth examination of the grammatical errors made by four Chinese IELTS test participants. Although the study did not address all components of speaking errors, more research might be undertaken on the remaining areas.

1. Introduction

Today, an increasing number of Chinese college seniors are eager to study overseas in order to acquire a different education system from the one they were taught in China. However, the result of related language examinations is a crucial factor in determining whether a student is eligible to study abroad. In addition, as there are few opportunities for pupils to engage and converse with one another in the classroom, their IELTS speaking scores are not particularly satisfactory. As a consequence, I opted to evaluate their performance on the IELTS speaking exam, as it is the most direct factor in determining their ratings. And the applicants' grammatical errors are the primary factors determining their ratings. Therefore, my primary interest in their performance is on their grammatical errors. This research analyzes the quantity, kinds, and frequency of each grammatical error produced by Chinese EFL (English as a Foreign Language) students during an IELTS speaking examination. At the start of the data collecting and discussion section, the IELTS speaking test questions were examined to see if they accurately reflected the applicants' real speaking ability. The performances of the four Chinese pupils were then recorded and evaluated. This research employed both qualitative and quantitative tools. By answering the following research questions, we'll know how often each candidate's mistake types occur :

RQ1: To what extent do grammar mistakes occur in the selected videos?

RQ2: What kinds of grammar mistakes are made by the candidates in the selected video?

RQ3: What is the frequency of each grammar mistake in selected videos?

2. Literature review

2.1. Framework of Grammar Mistakes

This study's framework of grammatical errors is based on Brown's theory (2010)'s which offers "clearly stated core concepts for evaluating and constructing assessment processes of all types and a succinct but complete discussion of assessing speech" (Brown, 2010). According to Brown (2010), there are primarily four kinds of grammatical errors in everyday communication: Tag question errors, slip-of-the-tongue errors, Subject-Verb agreement errors, and errors with the agreement between indefinite articles and the following word. Tag question errors and slips of the tongue are examples of structural flaws. In spoken language, tag inquiries such as "is it?" are often used to inquire about the exact attitude of the speaker's remark; slip-of-the-tongue errors are prevalent and frequently accidental. There are often pronunciation issues, the most common of which is the incorrect usage of "than" and "then." Subject-Verb Agreement Mistakes and faults in the agreement between the indefinite article and the word after it is examples of non-structural errors. Errors in subject-verb agreement show that the number and person of the subject and verb are incorrect. When an indefinite article is followed by a word whose pronunciation starts with a vowel sound, "an" must be used in place of "a" to avoid problems in the agreement between the two words.

2.2 Validity and Reliability of a Test

2.2.1. Test Validity

If a test is legitimate, it may be certain that the linguistic points it wishes to evaluate have been presented properly to the test applicants. Consequently, since most academics agree with this approach, "construct validity" is often referred to as "test validity" (Brown, 2010). According to Hughes (2010), construct validity has two subcomponents: content validity and criterion-related validity.

Whether or not a test has content validity relies on the test's specifications. This is due to the fact that the specification may provide direction for test item identification, i.e., whether the test's content corresponds to its intended scope. According to Hughes(2010) and Thompson(1992), a comprehensive test specification should include the following elements: "1. Content; 2. Test structure; 3. Timing; 4. Medium/channel; 5. Techniques to be employed; 6. Performance criteria; and 7. Scoring processes."

Thompson (1992) finds that test content is the link between instruction and evaluation. He asserts that instruction and testing were reflected heavily in test content. According to him, test material may be split into two categories: Text/task content explains the circumstances of language use. After determining the test's content, its organization, time, medium/channel, and methodologies should be defined. Assessors must choose the number of sections and the number and kind of questions to be included in each section, as well as the length of the test and the medium (e.g., pen and pencil) in which the test will be administered. In the meanwhile, the performance requirements should also be stated. In this section, the expected performance of test takers at various levels is calculated. And last, the evaluators provide the scoring techniques in detail, particularly for things that must be rated subjectively.

2.2.2. Test Reliability

A test is considered trustworthy if it has the least amount of luck or chance components. Livingston(2018) comes to the conclusion that: The scores of examination applicants would not be impacted by time or date; The test takers' results would not be impacted by certain types of questions, such as multiple-choice questions. The scores of the test takers would not be altered

by the replies of the evaluators, since certain things would be subjective and the rating would rely on the rater's own judgment. The significance of test reliability is mostly attributable to the fact that it is the primary method for determining the language proficiency of test applicants.

2.3. Brief Description of the IELTS Speaking Test

IELTS is regarded to be both an intense speaking assessment and an interactive speaking assessment based on Brown' explanation (2010)'s multiple speaking examinations. Before doing this research and producing more compelling findings, it is necessary to examine the efficacy of IELTS.

According to Brown(2010), there are five fundamental forms of speech evaluations: the imitative speaking evaluation, the intense speaking evaluation, the responsive speaking evaluation, the interactive speaking evaluation, and the extended speaking evaluation. During the IELTS speaking examination, the examiner will first ask the applicant questions about his or her everyday life, then demand him or her to describe an event, and then ask follow-up questions regarding the candidate's responses. In this evaluation, there are several little talks, and the majority of the things are given as requests. Consequently, the IELTS speaking test is a kind of responsive speaking test, which often consists of short discussions that imitate real-world settings. The purpose of such examinations is to determine whether or not the examinee might adapt to everyday life in English-speaking countries. The assignments might be offered as requests, remarks, daily greetings, etc.

3. Methods

In order to answer the three research questions, data was collected. To answer RQ1, all grammatical mistakes made by Chinese EFL (English as a Foreign Language) students and students from other EFL countries were recorded. To respond to RQ2, all grammatical errors were classified according to the types of grammatical errors described in Chapter 2 (Tag question errors, Slip-of-the-Tongue errors, Subject-Verb agreement errors, and errors regarding the agreement between indefinite articles and the following word) and their percentage differences were discussed. To respond to Question 3, the total number of mistakes made by applicants and the frequency of grammatical errors were reported.

3.1. Material Selection

The selected videos depict the performance of four Chinese students taking the IELTS speaking examination. All four applicants are women between the ages of 26 and 30, which is extremely close, therefore their English-learning durations are comparable within the Chinese educational system. In addition, they all have job experience relating to English use. The exam consists of three sections: The first consists of an introduction and interview lasting three to four minutes. The applicant must next do an "individual long turn," which requires him or her to prepare and then talk about a subject printed on a card. There is finally a two-way conversation. The examiner will ask the applicant certain questions on the part two response (IELTS Test Format).

The maximum score on the IELTS speaking exam is 9, and all four candidates scored between 6.5 and 7.0, indicating that they can "produce basic sentence forms with reasonable accuracy; And use a limited range of more complex structures, but these typically contain errors and may cause comprehension issues" (IELTS Speaking Band Descriptors).

3.2. The Detailed Methods of Answering the Research Questions and Data Collection

To answer RQ1 (How prevalent are grammatical errors in the chosen videos?), the total number

of phrases containing grammatical errors by all four contestants was tallied. Such a strategy has been frequently used in comparable research, such as BAOZ (2011)'s work such that it may serve as "the foundation for developing a taxonomy of errors and ranking the categories according to the frequency of occurrence and comprehensibility," The words between two periods constitute one phrase. In addition, the total number of phrases candidates said was also tallied. The proportion of grammatical errors in the candidate's responses was then determined. Consequently, the incidence of grammatical errors was evident. After analyzing these factors, a table was given to make the findings more understandable. The table was shown in the following format:

Table 1

Example of The Frequency of Grammar Mistakes that Appear in the Selected Videos.

	Candidate One	Candidate Two	Candidate Three	Candidate Four
Number of sentences which contain grammar mistakes				
Number of sentences which are produced by the candidates				
Percentage				

To answer RQ2 (What sorts of grammatical mistakes are committed by students in the chosen video?), all grammar errors were classified as Tag question errors, Slip-of-the-Tongue errors, Subject-Verb agreement errors, and errors involving the agreement between indefinite articles and the following word. Some examples were provided to illustrate the most common errors made by candidates for each sort of grammatical error. If the data for certain types of grammatical errors is insufficient, the various causes for this situation were also addressed. In addition, if the cause relates to the test's designation, approaches to enhance the evaluation were also considered.

To answer RQ3(What is the frequency of each grammatical error in chosen videos?), the total number of each error committed by candidates was tallied. The frequency findings were then computed as percentages using the total number of grammatical errors that arose while responding to RQ1. The most prevalent sort of grammatical error was identified, and potential causes for its prevalence were briefly explored in conjunction with the candidates' video responses. Following the debate, a table was shown to facilitate comprehension of the conclusion. The following example of the table was provided:

Table 2 Example of the Frequency of Each Kind of Grammar Mistake Appear in the Video

Grammar Mistake Types	Number of Mistakes	Percentages
Tag question mistakes		
Slip-of-tongue mistakes		
Subject-Verb agreement mistakes		
Mistakes about the agreement between indefinite articles and the following word		
Total		

3.3. Brief Introduction of the IELTS Speaking Assessment Test Topics

Each of the four contestants has been assigned the same issue. In the first round of the evaluation, applicants are asked if they are currently employed or enrolled in school. If the applicant is still a student, the examiner will ask her two or three questions on her major and school. If the applicant is at work, the examiner will ask her three to four questions about her employment and duties. After confirming the candidate's personal details. The examiner will next ask her four to five questions concerning the Internet, such as the frequency with which she uses it and her ability to envision life without it. Then, at the conclusion of the first section, the examiner will ask two or three questions regarding television shows in China, including the name of the most-watched program and the changes in television programming over the last few years.

In the second section, which is the personal statement, applicants are asked to prepare for one minute before describing a destination they most like to visit and the reason why. Then, in the third and final section, the examiner will provide questions based on their responses. Normally the questions come from three aspects:

1. The pros and cons of getting knowledge of the destination before the candidate’s departure.
2. The pros and cons of having a guide to travel with the candidate after arriving at the destination.
3. The policies that the government could offer to protect the local tourist sites.

After evaluating the whole topics and establishing that the test has adequate validity and reliability to accurately reflect the applicants' English-language skills, the candidate's performance will be evaluated and RQs will be answered. Listed below are the precise techniques for answering these RQs.

4. Results/Findings and discussion

4.1. Introduction

After defining and summarizing all the theories and frameworks employed in the research study, as well as the techniques of data collection and analysis, this chapter will describe the data's outcomes. In the section that follows, the IELTS speaking exam questions received by all four applicants are evaluated. After then, each of the three research topics was addressed individually. Finally, the limitations of this research were discussed.

4.2. The Analysis of the IELTS Speaking Test Questions

4.2.1. The Validity of the IELTS Speaking Test Questions

We can only declare that a test's content is legitimate if it meets the test specification (Hughes,2010). For this information, the IELTS speaking examination criteria were given as follows. The specification comprises a "speaking test description" (Table 3); and the particular phases of the speaking evaluation, which include "Introduction and Interview" (Table 4), "Long Turn" (Table 5), and "Discussion" (Table 6). (Table 6). (IELTS examination formats, 2020).

Table 3. Speaking Test Description

Paper format	The Speaking test consists of an oral interview between the test takers' and an examiner. Speaking tests are recorded.
Timing	11–14 minutes
Task types	There are three parts to the test, and each part 5 fulfils a specific function in terms of interaction pattern, task input, and test-takers output.

Table 4. Introduction and Interview

Task type and format	In this part, the examiner introduces him/herself and checks the test takers' identity. They then ask the test takers general questions on some familiar topics such as home, family, work, <u>studies</u> and interests. To ensure consistency, questions are taken from a script. Part 1 lasts for 4–5 minutes.
Task focus	This part of the test focuses on the ability to communicate opinions and information on everyday topics and common experiences or situations by answering a range of questions.
No. of questions	Variable

Table 5. Long Turn

Task type and format	<p>Part 2 is the individual long turn. The examiner gives the test takers a task card which asks the test takers to talk about a particular topic, includes points to cover in their talk and instructs the test takers to explain one aspect of the topic. Test takers are given one minute to prepare their <u>talk</u>, and are given a pencil and paper to make notes. The examiner asks the test takers to talk for 1 to 2 minutes, stops the test takers after 2 minutes, and asks one or two questions on the same topic.</p> <p>Using the points on the task card effectively, and making notes during the preparation time, will help the test takers think of appropriate things to say, structure their talk, and keep talking for 2 minutes.</p> <p>Part 2 lasts 3–4 minutes, including the preparation time.</p>
Task focus	<p>This part of the test focuses on the ability to speak at length on a given topic (without further prompts from the examiner), using appropriate language and organizing ideas coherently. It is likely that the test takers will need to draw on their own experience to complete the long turn.</p>
No. of questions	Variable

Table 6. Discussion

Task type and format	<p>In Part 3, the examiner and the test takers discuss issues related to the topic in Part 2 in a more general and abstract way and, where appropriate, in greater depth.</p> <p>Part 3 lasts 4–5 minutes.</p>
Task focus	<p>This part of the test focuses on the ability to express and justify opinions and to analyse, discuss and speculate about issues.</p>
No. of questions	Variable

According to the test questions I transcribed from the film (see attachment one), each of the four examinations will last between 12 and 13 minutes. And all four tests followed the following order: Interaction is examined first, followed by task input, then candidate output.

In the first section, titled "Introduction and interview," the four applicants are asked if they are currently working or attending college. The examiner would next ask the applicants other questions based on their responses in order to determine their capacity to create everyday conversation. Each of the first four sections of the examination lasts no more than five minutes and no less than four minutes.

In the second stage, all four applicants are asked to speak for one minute on the theme "Describe a location you would most want to visit." Then, after a two-minute presentation, the examiner would ask all four applicants the identical question: "Would your friends or family be interested in visiting the location?" All of these features may indicate that this portion of the speaking

assessment has a high level of content validity; nevertheless, there may be certain factors that reduce content validity. The sole phrase on the exam card in the video is "to describe a location you would want to visit." If the inquiry range could be defined, for instance, "Where is this location?" "What is the purpose of this location?" and "Why do you want to visit this location?" then the content validity of this section of the exam would be much greater. This is due to the fact that the command "describe" is rather ambiguous and does not mention particular elements that the candidate must offer.

Since the second section focuses mostly on the candidate's most desired trip destination, it is appropriate that questions about travel and tourism are asked in the third section. Some of the questions in section three were quite detailed, and all four applicants spent somewhat more than 5 minutes on section three, which may reduce the content validity. However, the time limit also indicates that the applicants' responses are detailed and specific, demonstrating that their abilities to defend ideas and evaluate themes have been properly shown. Consequently, the content validity of section three is likewise enhanced.

Given that the exam questions are all likely to be encountered in the everyday lives of students in English-speaking nations, the candidates' responses may be indicative of their conduct in a comparable circumstance. Therefore, this test's criterion-related validity is good. The test has shown very high content validity and criterion-related validity; thus, its construct validity is likewise strong. The exam was created to be as valid as feasible.

4.2.2. *The Reliability of the IELTS Speaking Test Questions*

As indicated in section 2.2.2, a test's high reliability indicates that its results are unlikely to be altered by chance or other variables other than the test itself. Creating effective exam questions is a crucial step in reaching this objective. According to the IELTS website, the procedures through which examiners construct speaking exam questions are as follows: (Table 7). In addition, while the topic in part two is likely to reduce the content validity, it increases the test's dependability. It is unlikely that the applicant will be required to recite scripted plays prior to the test. The candidate's speaking level would be more accurately reflected if she were required to formulate her responses at a certain time.

Table 7. Stages of Test Development

Commissioning	Teams of language specialists based in English-speaking countries are regularly commissioned to write test questions. The writers work on how to approach the item writing process, including material selection and the questions' development.
Pre-editing	Pre-editing is the first stage of the editing process and takes place when item writers initially submit commissioned materials. It ensures that submitted material conforms to the specifications in every respect.
Editing	Based on pre-editing feedback, materials are revised and submitted for editing. Materials are then approved for pretesting or are sent back to a writer for further revision.
Pretesting	New materials are pretested on representative groups of test takers from around the world. The Validation team collates and analyses resulting data to determine how difficult the items are, and how well they distinguish between stronger and weaker test takers.
Standard fixing	Standards fixing is to gauge the difficulty of new Listening and Reading tests in order to ensure that band scores on IELTS Listening and Reading tests indicate the same measure of ability.

In addition to the speaking assessment questions, the examiners' training and the speaking test's method are equally crucial. If an examiner lacks training, he or she may offer applicants imprecise instructions or display a negative attitude, so affecting the candidates' actual level. Unplanned speaking examination procedures may have the same impact. The IELTS-speaking test authorities have established a framework for strengthening these components of the test's dependability in order to avoid the issue from occurring. The structure was described as follows: (Table 8).

Table 8. Ways of Improving Test Reliability

Writing and certificated examiners assess speaking tests
Examiners are qualified English language specialists, with substantial relevant teaching experience, working to defined criteria and subject to quality control procedures
Selected Speaking performances are second marked by a team of IELTS principal examiners/assistant principal examiners who provide feedback to each examiner
Where there is a significant difference between a test taker's Speaking score, double marking is carried out
A routine analysis is conducted on each test version to ensure that the performances of test materials, test takers and examiners are in line with expected standards
Test takers who feel that their scores do not reflect their performance may apply to have their tests re-marked by a senior examiner.

Lastly, the level of authenticity may also indicate the test's dependability. All of the subjects and questions on this examination are based on real-world scenarios. Ultimately, the purpose of the whole examination is to evaluate the applicants' speaking and everyday communication abilities. Therefore, this test's authenticity is high. In conclusion, both the validity and dependability of this examination may be guaranteed. This examination may test what the examiners wish to assess and accurately reflects the candidate's actual speaking abilities. In the subsequent chapters, individual research issues were addressed.

4.3. To What Extent Do Grammar Mistakes Occur in the Selected Videos?

Throughout the whole examination, the four applicants delivered a total of 268 sentences. Nonetheless, 106 of these statements have at least one grammatical error, indicating that around 40 percent of candidate responses contain grammatical errors. Some sentences include many grammatical errors.

The first applicant responded to 14 questions with 67 sentences. In her responses, thirty phrases exhibit grammatical errors. This indicates that around 45 percent of her responses are erroneous (see appendix one). Among the four applicants, the quantity of grammatical errors in her responses is not the greatest. Nonetheless, a few of the errors were sufficient to impede the examiner's comprehension of the response; hence, her final grade is lower than that of others. The thorough and precise categories of errors committed by the applicants were elaborated upon in Chapter 4.4.

The second applicant responded to 16 questions with 61 sentences. Twenty-one of her responses have some degree of grammatical error (see appendix two). This suggests that just roughly 34% of her responses included contradictory information. Her grammatical errors are more prevalent

in response 9, which is the personal statement. The outcome is likely to indicate that the applicant has advanced conversational abilities, but her capacity for self-statement or presentation may be inferior to her talents in a spontaneous discussion.

The third applicant responded to 20 questions with 67 sentences. There are a total of 33 grammatical errors in her responses. This indicates that approximately half of her responses include grammatical errors. The proportion of grammatical errors in her responses is the greatest among the four contenders. However, the majority of her errors are slips of the tongue (such as pronunciation errors, forgetting words, and adding extraneous words) that do not impact the message. In addition, the applicant is adept at employing complex phrases; more than 70 percent of her responses include compound sentences, demonstrating her advanced linguistic proficiency. It might be the reason why the applicant still received a score of 7.0, which was even higher than the previous candidate.

The final contender responded to 15 questions with 73 sentences. There are just 22 sentences with grammatical errors in her responses. Consequently, just thirty percent of her responses include errors. This candidate's response is more precise than those of the other three candidates, as shown by the total number of phrases in her response. In addition, her responses include very few complex phrases, reducing the likelihood of grammatical errors.

Table 9. The Frequency of Grammar Mistakes that Appear in the Selected Videos

	Candidate One	Candidate Two	Candidate Three	Candidate Four	Total
Number of sentences which contain grammar mistakes	30	21	33	22	106
Number of sentences which are produced by the candidates	67	61	67	73	268
Percentage	45%	34%	49%	30%	40%

In the next chapter, this report would detail the exact sorts of grammatical errors that each applicant committed, along with instances of them.

4.4. What Kinds of Grammar Mistakes are Made by Students in Selected Videos?

4.4.1. Data of the Performance of the First Candidate

The first applicant among the four received a score of 6.5, indicating that she could "employ a mix of basic and complicated structures, but with limited flexibility, and may make frequent errors with complex structures, albeit these errors seldom create comprehension issues." (IELTS Speaking Exam Description) Two appendices provide the first candidate's complete responses.

The applicant is noted to make several slips of the tongue. As the two primary types of slip-of-the-tongue errors, both pronunciation errors and sentence boundary errors were present in her speaking evaluation technique.

Some pronunciation mistakes the candidate made include:

1. In the fourth chat, in response to a question about why she enjoys her university, she said that she may get information through her "license," which should be "lessons."
2. In the seventh chat, while answering the question about the last time she used the internet, she stated "prolems" instead of "problems" and "at the moment" as a single word, which sounds like "atimate."
3. In discussions 14 and 15, when she was responding to questions about the benefits and drawbacks of traveling with a guide, she mispronounced "few of guides" as "funny people" and "independent tourist" as "turret," both of which might lead to some confusion.

According to the IELTS speaking evaluation criteria, a candidate who achieves a score of 6-7 is more likely to mispronounce certain words or sounds, and as a result, their clarity is occasionally diminished. However, it is also important to confirm that the candidate has shown a diversity of pronunciation features and that her general ideas can be comprehended.

The bulk of the candidate's blunders involves sentence boundaries. In conversation 11, she used the word "seat" ("a seat of study") to refer to Cambridge University, which is a location. Furthermore, when she told the examiner how much time has passed since she first heard her mother's definition, she said "Then 10 flies" without including the most crucial definition word "years."

According to Hughes (2010), slip-of-the-tongue errors, even if accidental, are indicative of the candidate's anxiousness and lack of self-confidence. In comparison to the other three contenders, the first candidate makes the most slips of the tongue. Although not visible in the text, the data reported in Appendix 1 demonstrates that her responses were less fluent and coherent than those of the other participants. For instance, in discussion three, when she was asked why her institution was wonderful, she stumbled. In addition, the applicant is fond of utilizing conjunctions repeatedly, as seen by the frequent use of "and" in talks 7, 8, and 9, and even more frequent use of "so" in discussion 11. Although these situations scarcely constitute grammatical errors, they somehow reflect the candidate's anxiety and prompt her to make more slips of the tongue than others. Her grade would have been better if she had avoided pronunciation errors such as "two pies(should be "pieces") should undergo" and tense-related sentence boundary errors.

The majority of the subject-verb agreement errors the applicant committed occurred in discussion 7, when the examiner questioned the candidate when she last used the internet. This section contains several incorrect tense usages. The whole interaction should be written in the past tense since the paragraph begins with "One hour ago." However, in the phrase "My phone just has some issues (issues), and I am unable to connect it to the internet. At that moment, I cannot do anything since I cannot locate the location I want to visit, nor can I contact my friends, who might assist me. Then I just borrow someone's phone and contact the individuals who can tell me how to get here." None of the verbs, including "can," "has," "am," "ask," and "require," were altered to the past tense. Misuse of orientation terms such as "here" and "there" and "this" and "that" was another sort of subject-verb error found in the candidate's responses. This kind of error includes statements such as "I believe the Internet is really beneficial because anytime I want to discover someone or research a topic, I can do it online, thus it's very handy." The orienting terms "this" and "that" seem to relate to the same topic — Internet — in the same sentence. However, as I just noted, the candidate's primary error in the subject-verb agreement was a tense error.

The number of errors about the agreement between the indefinite article and the next word in

the candidate's responses is rather low. However, her use of the article "the" is quite problematic. In candidate responses, the article is often misused. For example, in discussion 4, when asked to describe the courses offered at her institution, she said "politics, international relations, and sometimes economics." If "Politics and International Relations" is a topic name, then "the" should be omitted. Moreover, in discussion 8, when she was obliged to discuss the benefits of television shows, she responded "the television is strong" without naming a specific television. To illustrate that "television programs are potent," the article "the" must also be eliminated. However, there are situations when the article "the" is not in the correct location. In lines such as "I would like to visit Cambridge University," there is no article. Since there is only one "Cambridge University" in the globe, the article "the" must precede the term and it must be stated as "the Cambridge University." Generally, errors in the agreement between indefinite articles and the next word are minor linguistic concerns. Occasionally, they may be so minute that even the examiner might overlook them. However, even little issues would impact the score on the speaking evaluation.

4.4.2. Data of the Performance of the Second Candidate

The second applicant had a score of 7, indicating that she could employ a variety of pronunciation characteristics and maintain flexible usage of features, although her response is impacted by a little L1 accent. The second candidate's complete responses may be found in Appendix Three.

This candidate has made less pronunciation mistakes, which are a kind of slip of the tongue, than the first candidate. The applicant makes the most significant meaning-altering pronunciation mistake in conversation nine, when she is asked to explain the area she most desires to visit. When she said "after our wedding," she said "our wedding" together, making it seem like "already." In chat number 13, she mispronounced "view" as "will" while speaking the phrase "point of view." Despite the fact that the applicant made few pronunciation errors and her intended message was clear, her final grade may be affected by these little errors.

Although the performance of the second candidate is superior, she has also committed several sentence boundary errors. I have seen that the applicant has difficulty with conjunction use. In talks 9, 10, and 16, the applicant misapplied the conjunction "and." She said that she "would and travel there with my family," in which "and" is entirely superfluous. Also in discussion 10, she said that she has informed her friends about Zhenjiang, but that few of them are interested in visiting. The word "and" should be substituted with "but" to show the disparity between her enthusiasm for suggesting her favorite city to her friends and their lack of interest. However, in discussion 16, the statement "so that they might carve their names into the wall" should be preceded by "and," since it is an example of the phrase "some visitors are not properly behaved."

The applicant has also committed several types of sentence boundary errors. It looks that she has difficulty with a few verbs. For example, in discussion 3, she said that she would "deliver tasks to my pupils through email" when "send" or "publish" would be more appropriate. In conversation 14, the applicant stated that when she visits to a small town, she can easily "wander" about and explore on her own. The word "go" denotes to go to a certain location, hence it cannot be used here. It could be a good idea for her to connect the verb "explore" with the phrase "do so."

In addition, the applicant has shown insufficient command of verb tenses. For example, in discussion 5, when the candidate was asked how life would be without the internet, she said, "It would make our lives more difficult," which is incorrect since it is not a reality. The word "become" should be "becoming" in discussion 7, when she responded to the question "What are

the most popular TV shows in China?" with "Entertainment programs are becoming more popular." "enjoy to do anything." is a fixed collocation, thus the word "wandering" should be changed to "wander" in conversation number nine, when she was explaining her husband's habit when visiting Zhenjiang city.

There are a lot of word usages that might confuse the examiner. For instance, in discussion 9, when she presented her daughter's age as "she was only two and a half years old at the time," she should have added "years old" after "two and a half" since "two and a half" might also represent quantity.

Subject-verb agreement mistakes are rather infrequent. This kind of inaccuracy is especially widespread during the candidate's final speaking assessment stages. Therefore, a tour guide would make my trip more enjoyable. "tour guide" and "are" were incompatible in this sentence. Since "tour guide" is singular, the "be" verb "are" should be changed to "is"; she also used "a vast nation" to describe the United Kingdom, which is a country. Consequently, "countries" should be changed to "country"; In conversation number 15, she said, "I feel both of us are essential to the experience." There are two obvious faults in this assertion. First, the fixed collocation should be "both of us" since "we" should be in the objective case. The second issue is that "we both" refers to two people, thus "be" should be changed with "are."

The agreement between the indefinite article and the next word has a single error. In discussion 15, she said, "I will seek assistance without a translator." Given that "translator" is a countable noun, the phrase should read "without the assistance of a translator." Compared to other contenders, this applicant has shown composure and provided highly rational responses.

4.4.3. Data on the Performance of the Third Candidate

The third candidate received a score of 7, suggesting that she was able to apply a range of pronunciation characteristics and retain flexible use of features, despite a little L1 accent. During the interview, the applicant committed a total of 29 grammatical mistakes, including 18 slips of the tongue, eight faults in subject-verb agreement, and just three problems in the agreement between the indefinite article and the following word. Appendix four contains the entire replies of the third candidate.

Several of the candidate's replies include pronunciation problems, which should also be classified as slips of the tongue. In conversation 5, when she wanted to say "send an email," she pronounced "send" as "said"; And in conversation 10, when she was introducing the British Museum, she said the British Museum is updated by "their advanced technology," in which the word "their" is separated into two words "there are"; And in conversation 19, when she was describing the advantages and disadvantages of unlimited tourists touring into historical places of interest, she said she "thinks boast of" is the correct phrase. The bulk of her poor score might be linked to her improper use of verbs and tenses, as opposed to her pronunciation mistakes.

As she was unlike the other three finalists, some of her verbal expressions made the talks unclear. For instance, in discussion 3, while describing her profession, she said that it is "up to" her to teach others to develop their skills. It seems that the term "up" should not be used here; In discussion 6, in response to a question about living without the internet, she said that "it would be really difficult to connect with people to express what you feel, where you are in life, and your frustrations." The phrase "to our share" is entirely useless and difficult to comprehend. In addition, in discussion 10, when asked to explain the British Museum, she said that via the museum, we might learn "what we have gained from our Asian ancestors." In this context, "Asian" refers to a geographical region and cannot in any way be interpreted as "time" In discussion 12, when asked to describe the advantages of reading before a trip, she said that she

would "make" herself well-prepared, which should have been "appear" or "look" Last but not least, in discussion 20, when she was asked whether there is any way to increase the quality of tourist attractions in China, she said that the government may create alternative "industries" and then offered "fruit or vegetable harvesting" as an example. The term "tour venues" may be preferable than "fruit and vegetable picking"

Even without words, her responses include some unclear phrases and sentences. For instance, "In the words" in discussion 6 is most likely "In brief" or "In summary" And in discussion 8, to characterize the program she cited in her response, we might say that it selects high-caliber vocalists; nevertheless, she used the nonsensical term "the program is kind of a selection nothing or a selection."

In addition to improper word use, her replies include other forms of sentence boundary errors, such as incorrect tense usage. For instance, in discussion 2, in response to the question of whether she enjoys her workplace, she said, "I grew up in Beijing, I study here, and I also work here" Because "grew up" is in the past tense, the verbs "study" and "work" must also be altered. In discussion 15, when asked whether she wanted a guide while traveling, she said, "The routine established by others restricts your independence." The word "limits" should be changed to "limiting" because to the presence of the preposition "is." Also in discussion 17, where she said, "Perhaps in the past, they didn't (see the significance of safeguarding sites of interest)," the phrase "don't" should be replaced with "didn't," since the time period is "in the past." The greatest issue with her responses is that she often muddles the idea she intends to convey by misusing words and tenses.

As for subject-verb agreement errors, she made one in discussion 10 when she said that we may learn "what our history develops and how it changes" at the British Museum. There should be a subject after "what" and "how"; the phrase should be rewritten as "what component of our history changes, how does our history evolve?" And in discussion 13, when questioned about her travel guide tools, she said, "books like Lonely Planet..." Since Lonely planet is not the sole source of travel information, the singular "book" should be replaced with the plural "books" Also in discussion 20, she said "the government is already to do so" and then used the pronoun "it" to refer to the government: "It does not simply attract guests today." Since "governments" is plural, the "be" verb "is" should be altered to "are," and "It" should be replaced with "They."

In addition to the errors in subject-verb agreement that have already been enumerated, there are more instances where subject-verb disagreement is possible. During discussion 14, when asked whether she would provide travel information to a friend, she said that her friends would know her "interests" and could recommend interesting sites and "restaurants." Since it would be more logical, it might be a good idea to make the two selected words plural (normally, individuals may have more than one interest, and there is the word "some" before "restaurant").

In conversations 5 through 10, each of the four errors in agreement between the indefinite article and the following word occurs. For example, in discussion 5, when asked about the last time she used the internet, she said that she "sent email" to her coworkers an hour ago. However, no article was needed prior to the countable word "email." It should be "sent an email" or "sent many emails" Additionally, in discussion 10, she omitted the article "the" before "human being"; The word "the" before "happy thing" is somewhat unsuitable in discussion 10 when she said, "And the pleasant thing I can see today is that the British Museum is really well maintained." It would be preferable if she mentioned "one of the cheerful things" or simply "a happy thing."

In conclusion, the third candidate has a viewpoint distinct from that of the first two candidates.

She is also capable of using certain professional verbs, phrases, and sentence structures. Nonetheless, her limits are clearly clear. In addition to her grammatical errors, she has a horrible tendency of repeating throughout the speaking evaluation. She often repeats the word she has just stated and corrects deliberate errors. Such a practice would impair the examiner's judgment and also hinder the candidate's own creative process.

4.4.4. Data on the Performance of the Fourth Candidate

The last applicant likewise received a score of 7, indicating that she had the same qualities as the second and third candidates. However, she deserves a higher grade in my opinion, since she has made fewer errors than other applicants and her pronunciation is much better. The fourth candidate's complete responses may be found in Appendix Four.

Regarding pronunciation errors, the most common sort of slip of the tongue, there are few in the candidate's responses. In discussion 5, when questioned about when she last used the internet, she said that five minutes earlier she was "checking in" with her pals on the Chinese chat program "WeChat." Therefore, the term "checking" should be substituted with "chatting"; and in discussion 6, when she was asked what she would do if there was no internet, she said, "I would go out and roam aimlessly." Actually, the term "emphasis" is unnecessary since there is nothing for her to emphasize; it should be "And aside," which suggests that she would continue to do other things in addition to reading books.

The remaining slip-of-the-tongue errors are all sentence boundary errors. She has the same difficulty with the correct use of verb tenses as other applicants. For instance, in discussion 3, when she was explaining why she left her prior institution, she said, "When she was there, they were not focused on the English-learning process." The "be" verbs "was" and "are" provide a boundary issue. It would be more accurate to say "they were not concentrating on the process of learning English" in chat number six, she said that she would be "doing" nothing, "wandering" about, and "thinking" about something that "occurred" to her mind. Since this is a vertical circumstance that does not occur in the actual world, the verbs "doing," "wandering," and "thinking," as well as "happened," should not be used in the continuous or past tenses. They should be altered to "do," "travel," and "think," respectively; Also in discussion 9, while describing the changes in Chinese television programming, she said, "the programs are becoming much more engaging than they formerly were." There is a clear tense use error here. She may say "the programs are getting more intriguing than they were in the past" or "the programs are becoming more interesting than they were in the past." Last but not least, in talk 14, she mentioned Jiuzhaigou, a popular tourist destination in China, as one of her trip experiences. If she wants to relate an event, the word "go" should be modified to "went" to reflect the past tense.

Although the quantity is smaller than that of the third candidate, there is still some meaning abuse in her replies that might cause confusion. For example, in discussion 11, while explaining the benefits of reading a handbook before reading, she said that "it is preferable to be prepared when everything you do before whatever you do," which may have confused the examiner. And in discussion 12, when she was asked to describe the downsides of reading a guidebook before traveling, she answered, "For me, I really want to be surprised in a location," which is another odd term. From my perspective and the next statement, "I want to discover something new on my own," it is probable that she means "I want to be astonished when I visit a new location" In discussion 15, when she was asked how the travel citations might be improved, an additional misspelled term was used. According to a strategy she suggested, the government should place a high priority on "education." She said, however, that the government should "teach" people to avoid "hot spots" and not follow the crowd. The word "educate" is inappropriate since it

refers to the acquisition of broad information and is often used to youngsters. She created an approach similar to "advocate."

Her comments also include several problems in preposition and conjunction use. False preposition used in discussion 1 lines such as "since I was in my last year of college" may mislead the examiner. Although she graduated more than three years ago, the preposition "in" before "university" suggests that the speaker is still a student. Therefore, it is better to use "of" for the phrase; Moreover, in presentation number 15, she said that the growth of tourist destinations depends on individuals who are "of" this kind of company. This preposition is redundant given that there is already a "in" before the object "this kind of industry" and "participate in" is a common fixed collocation. In conclusion, the candidate's minimal pronunciation faults suggested a lack of anxiety over the test itself. However, the precision of her word use may account for the most of her poor score.

Surprisingly, the applicant has made several subject-verb agreement mistakes. When asked why she wanted to be a teacher in discussion 2, she said that she loved her time as a student and that English is her favorite subject; nevertheless, these should be changed to their single forms, "student" and "subject." In discussion 4, she said, "and the second is because I want to look for information," as the second reason why the Internet is necessary. However, she removed the "be" verb "is" following "the second (reason)," leaving the phrase without a subject. And in discussion 10, while referring to the time she and her mother would go to Paris, she said, "The time we would travel to Paris may coincide with my graduation." The pronoun "it" is redundant after the subject "the moment" since the sentence already has a subject. Also in discussion 10, she said that traveling to Paris would save time and money, which should be worded as "problems" with "some" before the term. And in discussion 13, she used "are" before "the guide," and since the following words are "their duties," "the guide" should be changed to "the guides"; and in discussion 14, she said that letting too many tourists into the tourist site "had ruined the reputation of that region." Again, the "be" verb "is" is superfluous since the policy directly caused the result.

As for errors in the agreement between the indefinite article and the next word, there is just one in discussion 10, where the article "the" was inserted before the name of the city, "Paris." This statement violates the norms of the English language; no article should be before the name of a city.

In conclusion, the fourth applicant has shown an extensive command of vocabulary, phrases, and grammatical points. In addition, she has shown the capacity to formulate precise and comprehensive replies rapidly, and her L1 (mother tongue) accent is minimal. However, her score was diminished by the errors noted above. If these explicit slip-of-the-tongue errors and subject-verb errors could be fixed, her grade would probably increase.

4.5. What is the frequency of each grammar mistake in selected videos?

During the 13-minute interview, the first applicant made a total of 53 errors, including 24 slips of the tongue, 15 errors in subject-verb agreement, and 14 errors in the agreement between indefinite articles and the following word. No tag question errors have occurred.

Table 10. The Frequency of Each Kind of Grammar Mistake Made by the First Candidate

Grammar Mistake Types	Number of Mistakes	Percentages
Tag question mistakes	0	0%
Slip-of-tongue mistakes	24	45%
Subject-Verb agreement mistakes	15	28%
Mistakes about the agreement between indefinite articles and the following word	14	27%
Total	53	100%

The second applicant committed a total of 32 grammatical errors throughout the interview, including 16 slips of the tongue, 12 subject-verb agreement errors, and four errors with the agreement between indefinite articles and the following word.

Table 11. The Frequency of Each Kind of Grammar Mistake Made by the Second Candidate

Grammar Mistake Types	Number of Mistakes	Percentages
Tag question mistakes	0	0%
Slip-of-tongue mistakes	16	50%
Subject-Verb agreement mistakes	12	37.5%
Mistakes about the agreement between indefinite articles and the following word	4	12.5%
Total	32	100%

The third applicant produced a total of 29 grammatical errors throughout the interview, including 18 slips of the tongue, 8 subject-verb agreement errors, and just three errors with the agreement between indefinite articles and the following word.

Table 12. The Frequency of Each Kind of Grammar Mistake Made by the Third Candidate

Grammar Mistake Types	Number of Mistakes	Percentages
Tag question mistakes	0	0%
Slip-of-tongue mistakes	18	62%
Subject-Verb agreement mistakes	8	27.5%
Mistakes about the agreement between indefinite articles and the following word	3	10.5%
Total	29	100%

The fourth applicant made a total of 27 grammatical mistakes, including 16 slips of the tongue, 10 subject-verb agreement problems, and one fault in the agreement between an indefinite article and the next word.

Table 13. The Frequency of Each Kind of Grammar Mistake Made by the Fourth Candidate

Grammar Mistake Types	Number of Mistakes	Percentages
Tag question mistakes	0	0%
Slip-of-tongue mistakes	16	59%
Subject-Verb agreement mistakes	10	37%
Mistakes about the agreement between indefinite articles and the following word	1	4%
Total	27	100%

In conclusion, there is not a single tag question error shared by all four candidates. Because there is no contact between the applicants and the examiner, this is the case. It would be preferable if the IELTS speaking examination had the examiner conversing with the applicant in order to evaluate the candidate's ability to formulate tag questions.

4.6. *The Limitations of the Study*

First, since this article focuses primarily on the grammatical errors that candidates make, other types of errors that are likely to emerge in speaking evaluations are not examined or studied. In addition, only four forms of grammatical errors are discussed in this study. There are undoubtedly more sorts of grammatical errors, and the four categories discussed might likely be further subdivided.

The second constraint is that only the performance of four candidates is evaluated. Their forms of grammatical errors may not be typical. In addition, the first applicant received a score of 6.5, which is lower than the others' score of 7.0. This is owing to the minimal online resources I was able to locate.

All of the information comes from my dictation of the four videos. Some words and phrases in the video may change from the original version.

5. Conclusion

The research began with a quick examination of the IELTS speaking examination questions received by all four participants. After examining its validity and reliability, the test is deemed a good indicator of the candidate's actual speaking skills. The primary objective of this research was to examine the frequency, kinds, and total amount of grammatical errors committed by the four applicants. If I have the opportunity to do more research on the performance of Chinese students in IELTS speaking assessments, it would be preferable for me to witness and evaluate the performances of more students. In addition, several factors may impact the candidate's speaking exam outcomes. In addition to examining grammatical errors, additional errors, such as pronunciation errors, will be examined. In addition, possible approaches for enhancing the test outcomes of test applicants might be investigated in additional research. Su et al. (2021) emphasized the significance of using E-learning techniques such as computers and mobile phones. It may be of considerable advantage to test takers and society if more study is conducted on this topic.

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Biodata

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Appendices

Appendix One

1. Now I want to ask some questions about yourself. Do you work? Or do you study?
2. Why did you choose your place of work? / What do you study? And why did you choose your place of study?
3. Do you like your current place of work? Why?/ Do you like your current place of study? Why?
4. Let's move on to talk about the Internet. How often do you use the Internet? Why?
5. When did you last use the Internet? Why?
6. Can you imagine life without the Internet now?
7. Let's talk about television programs. Do you watch a lot of TV? Why (not)?
8. What are the popular television programs in China?
9. Has television programs changed a lot since you were younger?
10. Now I am going to give you a topic, and I'd like you to talk about it for one or two minutes. Before you talk, you have one minute to think about what you're going to say, and you can make some notes if you wish. Understand? Okay, and your topic is, I might need you to describe a place you would like to visit.
11. Do your friends or family also want to visit the place?
12. Now I am going to move on to part 3 of the speaking test. We were talking about a place you would like to visit, and I'd like to discuss with you one or two more general questions related to this topic. Let's start with the topic of traveling to the less familiar places.

Do you think it's important to read about a country before you visit it?
13. Where would you get the information from?
14. Do you think it's important to talk to friends as well who may have been there?
15. Some people who choose to go to unfamiliar places hire a guide. Do you think it improves the equality of the experience when you visiting places?
16. Do you think most people want to travel independently or travel in groups?
17. Let's talk about tourism in general. Do you think that the government should protect historical places of interests to encourage more tourists?
18. Do they protect historical places of interest in China?
19. Do you think there are any disadvantages of being a lot of tourists visiting historical places?
20. Do you think tourist places can be improved in China?

APPENDIX TWO

1. 6.5

1. I'm a students 2 and I'm a 4 senior students in China's 2 Foreign Affairs University

2. I'm studying a major 4 in English and International Studies

3. Because I think this university is English major, that's very, ehh, it's very good for the students to study there 3. And the graduates from this university they 2 can find a very good job, and can also make a big contribution to this society. So I choose this place.

4. Yeah, I like it very much. Because I think what I can get from here is allowed and the teachers they are... they have very high level of their professionals English speaking. And I can also get some other knowledges 2 from here, such as the 4 politics and international relations and also sometimes economics, and I can also get all of these knowledge from my license(lessons). So I think this place is very wonderful.

5. I think is everyday. Because I can get information in this Internet. Such as I can chat with my friends, and also because sometimes I want to know what is the news today and a week I can check on the Internet 3. And sometimes when I want to look for somebody, look for some issues, I can also find it in here. So that 3 is very convenient.

6. I think half hours 2 ago. Checking where this place is on the street.

7. Well, that was a very good question because I thought it was just on the street. An hour ago my phone just has 3 some problems (problems) and I can't connect it to the Internet. At that time I'm 3 really, I can't 3 do anything because I cannot find the place I want to go. And I cannot connect with my friends and they can help me. And then I just ask somebody to borrow their phones and to connect with the people I need to know how to get here. So atimate(at the minute) thought how can live without Internet I think that is impossible in the future.

8. Yeah. Because the TV 4 has, the video is very powerful that you can get the correct information that is more vivid than on the internet. And because watching TV you can spending the 4 time with your parents and with your family. And we can talk about the same topic and connect with each other, and that is very good way4 to strengthen the bounds(bonds) in the family.

9. I think the problem(popular) program4 in China may be some talk shows. Today there are various types of talk shows, such as Take Me Out that is a program that's make boys and girls to make friends there. And also there are news talk shows. There are very famous journalists and experts they are talking about how to look at this issue today. And also some any other programs that can make the family to clear the air and to ease the misunderstanding with each other. So the talk shows actually so is a method that teach people and tell people how to do in today's society.

10. Yeah, it changed very very much. I think when I was a child I can only see some how to say, how some very simple problems such as some cartoons and the characters and the content were very very simple. But today that is totally different.

11. The place I'd like to visit is Cambridge University4. After the graduation along with my friends as the students who at married(admired) this prestigious university for a very long time. My mother used to visit there when I was a child. Her description of this great university actually give me the first definition of what a seat of learning should be. Then 10 flies when I became a teenager I got access to the 4 very famous Chinese poets Xu Zhimo. His verses of his masterpiece leave me on Cambridge give me a very deep impression and made the campus like a wonderland to me. This(this) turn(term) I have been longing for visiting this place and seen ayran(every) scene depicted in his life.

And such as plotting in a theme of lights and the Cambridge River, silence wick trailing behind Mac Nu. Furthermore, the romantic relationship between Xu Zhimo and Lin Huiyin, a greatest of 4 female architect and poet in China and their relationship was happened in the Cambridge University. And this story leaving a very known touching story on everyone's lips. So I hope that one day I can visit there with my boyfriend, wandering around the campus by the sunside, and reproducing the two lovers there. So overall in my mind the Cambridge University is not only academic but also historic,

romantic and full of stories. So I really need for experience by myself and also feeling the exclusive charm.

12. I think that is important because you should firstly know about this country you should know about its culture, you should know about its customs, you should know about what its people like. And them you can go to there⁴ because you can,, such as you can search on the Internet that's which place I want to go, what I can see in that country and you go there and you can check your points, and to check out the places step by step and that is more efficient and much more that is much better.

13. I think the only this one is maybe there will be live(less) surprise for you. Because you have know that and then you can say that that is a little boring sometimes

14. I think funny you(few of) guys(guides) know tourists of placing that is now the best way to visit there because the guides just lead the tourists in the same course every day and they just want to show you what they want to show you. So that is you should find out what you want to see by yourself. And you can regard it as an adventure and you can take it by yourself and your friends. And that is very good experience without guidance I think.

15. I think most people prefer to have a guide because sometimes we only want to rely on somebody and sometimes they feel the sense of insecurity and some times they want to choose to have a help around him. But personally I think independent turrett(tourist) is much more interesting.

16. I think they can undergo the two thing at the same time. Only one hand they can protect these places and they can help to protect the environment and help to rebuild these buildings as well. And on the other hand they can also encourage tourists to go there because this is the best way to make some culture, make your traditions, make your thinking, to travel around the world. So I think these two pies(parts) can be undergo at the same time.

17. I think in China the government has taken a lot of issues, taken a lot of measures to protect this place as interesting places and they can they also warn the tourists that you cannot do something you do harm to the buildings or the architects. Because this is our treasure and and you should protect that as well. So I think this is a good way. You can do what, you can do your obligation and then you can remind the tourists to do their obligations that is good way.

Appendix Three

2 7.0

1. I'm working now. Actually I am a teacher, since I have a little child it was my dream to be a teacher because both of my parents are teachers. My mother is a primary school music teacher and my father is a middle school Chinese teacher, and I would like to be a language teacher. Doesn't matter which kind of language it is, because I really think language is amazing. It's a good way to communicate with people from different cultures.

2. Till now I'm quite satisfied with my work.

3. About once a day. Because I'm working and I need to use the computer to do some paperwork, such as to prepare my PPT for my students, and sometimes I will give 2 assignments through the email to my students and they will give me their feedback.

4. Last evening. Because yesterday I need to email some information to one of my colleague because they asked me to write a thesis about the program we are doing right now.

5. I don't think so. Because nowadays Internet is so common. Everyone use Internet to do things. Doesn't matter with 2 related with 2 work or with our life. So if there were no Internet I think probably we would lost many ways of communication, and it will 2 make our life more difficult.

6. Not very much. Because I 2 quite busy now. Quite a lot of time is related to my work and also I have a little girl who is only 5-year-old. So I need to spend a lot of time to play with her. It's very important I think.

7. From my point of view, nowadays because people are quite busy with their work or with their life, so most people prefer entertainment programs and these programs are become 2 more and more popular. And the producers try to entertain the audience, so they try to find out new ideas, and try to make new kinds of entertainment programs.

8. Yes I think so. When I was young there are much fewer programs that were provided to the audience but nowadays we have many people who are working in the field and the technology is developing very fast.

9. The place I would like to visit is called Zhenjiang which is a very small city in the southeast part of

China. Actually I have been there twice in the past few years. The first time I went there 3 with my husband just a few months after already(our wedding)2. Because it was the place where my husband worked for several years and till then I had never been there before. And my husband told me that he liked this small city very much because he is a person with a quiet personality and me too you know? And sometimes he just like to wandering 2 along the street beside the riverbank without thinking 2 anything just to look at the people doing their everyday work, and that will give him a peaceful mind. And I do 2 want to know what kind of city it is, so we went there. And the next time, it 3 was after the birth of my daughter, at that time my daughter is only two and a half 2. We brought her there because both of us have 2 a very good memory in the city. We would like our daughter to feel the same feelings as 2 us you know? I believe in the future I would and 2 go there with my family again and would like to enjoy.

10. I actually told them about this place, and 2 not many of them would like to go there.

11. I believe so. Actually that's my habit of travelling. I am a fan of travelling, and I went 2 to many places around China and some oversea places before. Especially for those foreign countries, before my trip, I would like to read the books both about the landscapes and also about people's experience living there.

12. You know, the more you know about the culture, you know about the people and the place, the better feeling you will get when you are 3 arrived there. Because you can communicate with the local people more easily and when you see their different ways of doing things, you won't be shocked, you will feel comfortable because you 3 know that's their way of doing it.

13. The disadvantages...sometimes, yes, you need to be very careful with choosing the books because some of the writers have the bias with the local people because they have their own point of will(view) 2, which is not generally accepted. If you choose this kind of book it's 2 tragic.

14. I think it depends. If it is a small place, I don't think I need any guide. I can explore it by myself. Because it's easy to go 2, and I can access the local transportation easily. But if it is a large countries 3 such as Britain, I need to travel for a long trip, and I can't manage the whole trip by myself. So if there are a 3 tour guide, it would make my trip more comfortable and convenient.

15. Yes, I think both of we 3 is very important for the trip, especially for the local people since I can speak English just enough to communicate. So I can get to know them more, and I can especially can 2 get help by myself without the help of 4 translator.

16. Actually this is something with two sides. Protection for the historical relics is good because those relics without any protection may be ruined in a few years. But the protection for the tourists is not a good thing, I'm afraid. Because if tourists tour into those historical sites it would be a disaster for those old buildings, and you know some tourists are not well behaved. So 2 they could cut their names on the wall or some very bad things for to 2 this kind of terrible places.

Appendix Four

3 7.0

1. I'm working. I'm working in a multinational pharmaceutical company.

2. Of course. I grew up in Beijing, and I study 2 here, and I also work 2 here, it's just naturally 2.

3. Yes. Very much I think. I like my job as a HR manager and my responsibility is up 2 to train people to develop 2 talents in our company and I think it's a very good platform to grow for me and also to help others in the company.

4. Every day. Both for work and also for entertainment personally, and connect with my friends, my classmates, and also at work for emails, all kinds of business meetings, we use network every day.

5. Maybe one hour ago? Just before I came here. Because I said(send) 2 4email to my colleagues to discuss about the business that we are going to do, it's just the daily routine for us, and emails to my colleagues.

6. No, but I think it would be very boring, and it would be very difficult for you to connect with others to our share 2, what you feel, where you are with your frustration in life, in the words 2, I think it would be terrible.

7. Nowadays not a lot of, quite seldom actually. Cause I have a kid, he's just one year old, and after work I have to accompany with him, play with him and after he falls asleep, I will go on internet surfing for some news and maybe do some online shopping. So I don't have too much time watching TV.

8. Nowadays I know The Voice, is kind of a selection nothing or a selection 2, yeah.

9. Yes, I think it changed the people's lifestyle, and also it also the TV programs can help you change your vision and you 3 have a much broader vision to the whole world. You can visit a lot of places without going out, without leaving the country, you can just watch the TV programs about travelling, about culture, and it what I think it 3 widen our horizon.

10. The place I'd like to go is the British Museum, which is located in the center of London. Why I want to go to the British Museum is because I think it's one of the largest and most comprehensive museums in the world. And as far as I know, it has a history about 400 years, and it has about 700? 700 million objects collected in the British Museum. I think it's 4 very good place that you can feel,

you can feel the history, the whole history of 4 human being 2. And it has 10 departments covering all kinds of objects collected from all the four continents from the whole world and also cover different kinds of columns like pottery, money, and the paintings, prints... I think it's a fantastic, fantastic place that you can know, you can know what 3 our history evolves, how the history evolves, and what we are, what we benefit from our our ancestors in Asian times2 . And another reason of course is that I want to, I want to go to the British Museum with my son. Although he's very, he's very small now, he's only one year old, but I think it, it's a very good place for children and for properly for all the other people in the world to know about the whole world. And the 4 happy thing that I can see now is that the British Museum is very well managed and updated by, there are(their) 2 advanced technology.

11. Yes, my husband. He was a big fan of history. So we, we have them, you know, we share this the same interest so we want to go there.

12. Yeah. I think homework is very important before you do the travelling. And you can, you can know some experience or what comments from the, from the previous visitors and then

recently(read some of their) 2 history, you will know that which kind of place they 2 were visiting in the country and what kinds of food, or what culture is there. And you will make 3 very well-prepared and you will not, you know, violate some customers there. Yeah.

13. Sometimes, both from the book 3 like Lonely Planet, and also from the Internet, some trip advisor or some PBS or forums in the website and you, the visitors that they share their experience there. It's very useful.

you can feel the history, the whole history of 4 human being 2. And it has 10 departments covering all kinds of objects collected from all the four continents from the whole world and also cover different kinds of columns like pottery, money, and the paintings, prints... I think it's a fantastic, fantastic place that you can know, you can know what 3 our history evolves, how the history evolves, and what we are, what we benefit from our our ancestors in Asian times2 . And another reason of course is that I want to, I want to go to the British Museum with my son. Although he's very, he's very small now, he's only one year old, but I think it, it's a very good place for children and for properly for all the other people in the world to know about the whole world. And the 4 happy thing that I can see now is that the British Museum is very well managed and updated by, there are(their) 2 advanced technology.

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13. Sometimes, both from the book 3 like Lonely Planet, and also from the Internet, some trip advisor or some PBS or forums in the website and you, the visitors that they share their experience there. It's very useful.

14. Yeah, I think that's very vivid, very vivid suggestions you can get from your friends and probably he or she knows your hobby or your, your **interest** 3, and he can suggest or advice some good places or **restaurant** 3 that you can go in that country.

15. Personally, I won't do that of course. It's not that free of course, it limits your freedom sometimes. The routine set by others is **limits** 2 your freedom. So if I went to another country, I won't hire a guide.

16. Nowadays, I think it depends on the age, the age of people. Maybe for the older people and they will, they will hire the guide of course. They think it is safer, it's more secure, and they don't have very good language **skill** 3 in other countries like us. 2 For we can, we can speak English but I think for young people they won't, most of them they won't choose, you know, to choose to hire a guide in another country.

17. Yes, of course, I think it's very important, and I think a lot of government in many countries **they** 3 are doing the same thing of course. Maybe in the past they don't 2, they didn't realize that, that the importance to maintain the place of interest. But actually it's a kind of sustainable development for tourism **for** 2 country.

18. Yes. I am happy to say that more and more governments, or city government or provincial government **that they** 3 are doing so in China.

19. Of course, but I think **boast(both)** 2 of advantages and disadvantages exists for, for this kind of thing of course. If too many people, too many visitors visit the historical places it will damage the scenery or the environment there. Sometimes it will become too, the people there, local people there will become very money-driven, and they, they just don't protect, to protect the place of interest. They 2 just want to earn money from it. So I think it's a bad thing.

20. Yes, I think they can. They can develop more, more business around it, like culture, they can print more books, or they can, they can also develop other, other **industries** 2 like probably a fruit, or vegetable picking, and actually the governments **is** 3 or is already doing so. It not just **attract** 3 visitors to only visit today a place of interest, they can have various kind of activities to do.

Appendix Five

4 7.0

1. Well I've been working as an English teacher for more than three years since I was in the last year **in** 2 the university.

2. Well first of all I choose to be a teacher first in the first place because I think I really enjoy the moment when I was **students** 3. Because they're so naïve and very cute and they make you laugh. The second is because I think I'm good at English. If I want to teach something or a subject I have to be good at it, so English is my best **subjects** 3, I THINK.

3. Yes, absolutely. I've just changed my job from one institution to another, and the reason why event(I abandoned) the formal one was that I, well, I was not really happy when I was there, because they are not **focused** 2 on the process for learning English but the skills itself. So, but the place I'm working now is completely different. They focused on the language itself and they just do not care that much about the skills. I think that's good for students to really live in a foreign country.

4. Well I have to say I use it every day, probably every moment for free. Because I do a lot of things on the internet. First of all, I chat with my friends, and sometimes I chat with my students, and the second **3** I want to look for information that I need when I work, and besides these stuff I think I pretty enjoy movies on internet and to be honest, I think 2 they're free and it's better than **to** 2 go to the cinema.

5. Well, like 5 minutes ago? I checked(chatted**2**) with my friends on the wechat, you know a program.

6. Well, I would probably read a book. I've been enjoyed reading books, especially the paper version. I don't really like the electronic books. Emphasize(And besides) **2** that, I would probably go out and sit there, **doing** 2 nothing, just wandering around and thinking about something that happened to my mind.

7. Yeah, but not using television. I watch a lot of TV shows by computers.

8. I think in this summer it should be some singer programs, make the voice of China, the best voice... I don't know their names, but I think they're super popular among people.

9. Yes, definitely. First of all, the television itself I think it has changed like from the very small one into a larger one, and there's like endless, you know, um it can be any kind of size right now and I

think the functions of the television has changed a lot, and they involved like you can plugged in the USB and enjoy the movies that you downloaded from the internet, and about the TV programs itself I think it has changed as well. First, we have black and white version, and now we have colour 2version ; And the second would be the programs 2 have become more and more interesting than it used to be. And I think , but I think the best side about it is that people spend less time on, in front of TV than before because they have so many options.

10. Okay, I've been, I was dreaming about going to Paris when I got time, so I would definitely go to the 4 Paris if I got the chance and the person I wanna bring with me is my mom because I think she deserves her rest after like 30 years devoting herself to our family, she deserves a rest when I graduate from the University of Edinburgh because I will go there next year and the reason why I want to go to Paris specifically is for three reasons I think. First of all, both of my mom and I are fans , big fans of Paris after hearing all the beautiful things about it and the second reason would be I've watched a lot of films or movies made or shoot in Paris or by the French directors so I think I

really want to go to that place and experience what it has been shown in the movies. I think it could be very different from what I do in front of, you know, seeing 2 the screen and looking what it is and I want to feel what it feels like when I actually be there and besides it 3 got great food there I think. I like their cuisines, and I want my mom to taste it as well. And the last reason would be I think it's more convenient to go to Paris because, since I study in Scotland, I think is very close to Paris and it would be very convenient to go there, and I think the price of the flight wouldn't be very high. So it's some time and money saving 3 problem I think.

11. Well, first of all, I think you will get a first image about that place you're going to visit. You can prepare about reading those books, like what you need to bring or the temperature there, or what you need to pay special attention to like the local customers so that you wouldn't, you know, be 3 dangerous in that place. And the second I think it's better to be prepared when whatever you do 2 before whatever you do . And so by reading something about the place, you could get familiar with in the first place. And second I think you will like encourage you 3 to go there even more because after you read those materials, which are really talking good about that place. It makes you want to go there more.

12. Yes, absolutely. It's like there's gonna be no surprise at all. Because everything good about that place is there really written in the books, so you can't really find something new by yourself and for me I really like to surprise me 2 in a place or I want to find something new by myself. So I don't want to be towed in advance.

13. Well, and actually I think it depends on how good or the quality of the guide himself or herself. Besides that I think if you are so lucky to have a good guide it will enhance the experience of visiting a place she know more about the places than you do, she would probably lead you to some great places that you've never been where you've never known if she didn't. But if you're so unfortunate, I think if the guide are 3 gonna their jobs you would have possibly wasted your time, wasted your money, and wasted your emotions like you want to experience something great, but they lead you to the opposite, it would be a disappointing stuff.

14. Yes, absolutely like we just had the national holiday and probably you have heard the news from the internet or wherever, like in Sichuan Province, every, almost every single person goes to Jiuzhaigou. I go,2 and it was like tons of people crowded there and I think most of them could not get off the hill after a day so I think it turned out to be a disaster, and it's quite, it's absolutely the opposite of what they thought of before they go there. So it's 3 ruined the image or an imagination about that place. The second I think to the tourist attractions itself, I think it could bring, it could bring damage as well, because they are natural places, especially for these natural places. If a lot of people go there without any control by the government or by the rules, the natural beauty would not be last 2 for long.

15. I think it depends on who are participated of 2 who are involved in this kind of industry. First of all, I think the government should take their responsibility to build some rules like I said. Control the

amount of people who can go in or to enter the place at the same time and second I think it should be about **education** 2. We educate people that even though those places are great, you can, you know, plan to go there in different times or you just don't go to the hot places because every place could be beautiful if you see the beauty of that, and do not follow the flow right? And the third I think would be the agencies that in charge of some certain areas of the tourist attractions. I think they should, should not umm you know, like exaggerate the beauty of a place in order to attract more people to go there. **This** 3 should be honest sometimes because people can be mislead by that, and disaster would happen.


Online Language Testing and Assessment in the Pandemic: Opinions from Test Administrators and Examiners

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ABSTRACT

Keywords: foreign language testing and assessment, online language testing, online testing and assessment, online at-home test delivery

The Covid-19 pandemic has impacted foreign language education in general and assessment practices in particular. Many changes have been implemented regarding the mode of language testing and assessment when conventional face-to-face examinations cannot be applied. One radical change is the emergence and acceptance of online at-home assessments. The University of Languages and International Studies, Vietnam National University (VNU-ULIS), has followed this trend with numerous online testing and assessment activities during the 2021-2022 period. These activities assess learners' language learning progress and proficiency via different tests. To evaluate the strengths and weaknesses of online testing and assessment during the period, the researchers surveyed more than one hundred test administrators and examiners on their opinions and experiences in virtual exams. The participants shared valuable information on their experiences with the online system and their beliefs on the advantages and drawbacks of online at-home assessments. As a result, the research project can develop and later expand its sample as well as utilize other data collection methods to gain multi-dimensional information.

Introduction

The last two years have witnessed dramatic changes in every field due to the pandemic's influence. In education, alternative forms of teaching, learning, and assessing have been implemented to replace conventional face-to-face classrooms in the context of lockdowns and social distancing. Regarding testing and assessment, a number of online, open-web, and at-home examinations have become available (Gehringer & Peddycord III, 2013; Isbell & Kremmel, 2020). Around the globe, online assessments have been conducted for English, French, German, Spanish, and Korean language proficiency. In Vietnam, online teaching and learning are regulated by guidelines issued in March 2021 by the Ministry of Education and Training (MOET). According to the document, online testing and assessment are utilized only when the conventional form cannot happen, and the at-home examinations are under MOET's regulations. Accordingly, the university and its associated middle school and high school organized various online testing and assessment activities in 2021-2022. So far, studies in this

new field in Vietnam are quite limited. Therefore, this research was conducted with the purpose of collecting test administrators' and examiners' opinions and experiences concerning online examinations at the university. The ultimate purpose of the study is to report what test administrators and examiners of this Vietnamese university have experienced and how they perceive the strengths and disadvantages of computer-based assessment forms. As a result, the researchers can reflect on what happened in the area of university testing and assessment, then contribute valuable information to the field.

Literature review

The body of international research has seen papers targeting online testing and assessment. According to Isbell and Kremmel (2020), a number of test providers have converted their traditional paper-based test formats to computer-based versions. Some big names in at-home proficiency testing are ACTFL Assessments, Duolingo English Test, IELTS Indicator, LanguageCert, TEF Express, TOEFL iBT Special Home Edition, and Versant. Not only does this conversion happen in the field of high-stakes tests, but it is also common in educational institutions regarding diagnostic tests, placement tests, and summative assessments (Plough & Raquel, 2020; Ockey, 2021; Purpura et al., 2021). The common feature of examined tests is the usage of technology and supervised software. Due to the COVID pandemic, automated assessment has become a part of the teaching and learning process throughout the world. Technology has been applied in both formative and summative assessments, from classroom assessments to high-stakes examinations. This addresses the issue that the usage of automated assessment may lag behind technological development (Dreher et al., 2011). Additionally, there is a concern about cheating in online tests. Li et al. (2021) cite methods HAT, Examity, and Proctortrack as some of the associated technologies assisting with online proctoring.

Teachers and learners are reported to benefit from online testing and assessment. Students can take exams nearly anywhere with an Internet connection (Gehring & Peddycord III, 2013), and teachers can easily distribute the testing materials with technical support (Yulianto & Mujtahin, 2021). Moreover, the effectiveness in terms of saving time, the convenience of the platform interface, workforce involvement, and reduction of administrative expenditures are undoubted advantages of at-home exams (Dreher et al., 2011; Baleni, 2015; Gehring & Peddycord III, 2013; Li et al., 2021). From both teachers' and students' viewpoints, the benefits of immediate feedback and automatic grading are highly appreciated. Students feel much more encouraged when they receive their scores with prompt formative feedback from teachers. (Demo, 2009; Baleni, 2015; Forrester, 2020; Hoang et al., 2021). These can be a part of “pedagogical benefits”, which also include the idea that teachers are freed from administrative tasks like preparing paper-based tests or marking assessment items, then providing individual guidance to students (Dreher et al., 2011). This study also showed that the pedagogical benefits of online assessment could lead to a commercial benefit for the educational institution. That is to say, "pedagogical benefits of improved assessment methods and outcomes can affect the overall university performance as a business enterprise." (Dreher et al., 2011, p.177). The institution can increase its reputation from its valued assessment platforms, thus attracting more learners to its doors.

However, the drawbacks of virtual assessment should be mentioned. Gehring & Peddycord III (2013) summarized the disadvantages of online testing, which covers aspects of administration,

grading, and academic integrity. They emphasized that if the Internet connection is poor, the exam can be a failure (Yulianto & Mujtahin, 2021). Thus, there exists a dependence on technology that sometimes goes beyond human control. Cheating in virtual exams is worth considering, even though many measures have been provided to prevent this issue. Furthermore, teachers and students also recounted their negative feelings towards the test validity, practicality, and reliability of e-assessment (Dermo, 2009; Yulianto & Mujtahin, 2021; Hoang et al., 2021). Teachers, in particular, reflected that they initially faced serious barriers related to pedagogical, technical, administrative, and affective issues after the shift to online assessment (Ghanbari & Nowroozi, 2021). Even when the course ended, surveyed teachers still reported some lingering problems affecting their practice. They stated that being competent in technology for online assessment was still a hard duty for them. They had a tendency to choose face-to-face teaching as a preferable choice due to its interactive features over the technology.

In Vietnam, the education system has followed the global trend of online instruction due to the pandemic. MOET issued Decision 09/2021/TT- BGDĐT on March 30th, 2021, which provided regulations on managing and organizing online teaching and learning activities in general education institutions and continuing education institutions. The decision regulates what to do with formative and summative assessment in the context of virtual classrooms. Formative assessment is conducted during the teaching and learning process under MOET's control. Summative assessment, if it cannot be held at the institution due to social distancing or lockdowns, should occur online. The heads of the institutions are responsible for online examinations to ensure their validity, reliability, and equity. Additionally, schools and higher education institutions across the country have also implemented a range of online testing and assessment in the past two years. Regarding online learning and teaching activities across the country, some studies have been conducted for the last two years (Nguyen, 2021; Tran & Nguyen, 2021; Andrew, 2022). However, there are not many research papers and academic publications related to virtual language testing and assessment in Vietnam. Therefore, this study was carried out to contribute to the national research community of online testing and assessment activities and narrow the gap with the current global research trend.

Research Questions

The study aims to answer three research questions:

1. What were test administrators' and examiners' experiences of online language testing and assessment?
2. What are the advantages of online language testing and assessment as perceived by test administrators and examiners?
3. What are the disadvantages of online language testing and assessment as perceived by test administrators and examiners?

Methods

Pedagogical Setting & Participants

The research was conducted at a university in Hanoi, Vietnam. The university has its associated middle school and high school. The total sample involves 109 test administrators and examiners. Of those participants, 24.8% are university English language teachers; 24.8% are

university teachers of languages other than English; 24.8% are English language teachers at a gifted foreign language specialized high school, 15.6% are English language teachers from a middle school, and 10% are administrators from these three institutions. The average age of the participants is 36.45 (SD = 8.8). The average number of years of experience is 12.1 (SD = 8.75), with 97.2% being female, 6.4% male, and 0.9 % did not reveal their gender. The majority of the participants (96.3%) claim that they usually use computers in their daily life.

Data collection & analysis

An online questionnaire was built on Google Forms to survey test administrators and examiners about their experiences of online language testing and assessment as well as their opinions on the advantages and disadvantages of this approach. The questionnaire has four main parts. The first part aims to collect the participants' background information. The second part has questions to explore what test administrators and examiners experienced while doing their online assessment tasks. The next part asks the participants to share their opinions on the positive aspects of online language testing and assessment, whereas the final part focuses on their ideas about the drawbacks. The survey questions were built upon the analysis of and adaptation from research by Ockey (2021), Isbell and Kremmel (2020), Li et al. (2021), Dreher et al. (2011), Baleni (2015), Gehringer and Peddycord III (2013) as well as upon the experiences of the research team, having played different roles in online test administration. Most of the questions are Likert-scale type. The scale is from 1 to 4 or 5, showing the degree of agreement (from strongly agree to strongly disagree) or frequency (from usually to never). Also, some open-ended questions were added to collect more ideas from the participants, if any. Regarding data analysis, descriptive statistics were chosen to present and interpret the data.

Findings

Test administrators' and examiners' experiences of online language testing and assessment

The data show that the test administrators and examiners experienced online tests for various purposes during the pandemic period, namely mid-term tests, end-of-term tests, and achievement tests (i.e., a language proficiency test as an outcome requirement for students). Among those, the majority dealt with end-of-term (81.7%) and mid-term tests (81.7%), while a little more than a third (35.8%) played a role in online achievement tests (Figure 1). This supports the findings of Plough and Raquel (2020); Ockey (2021); Purpura et al. (2021).

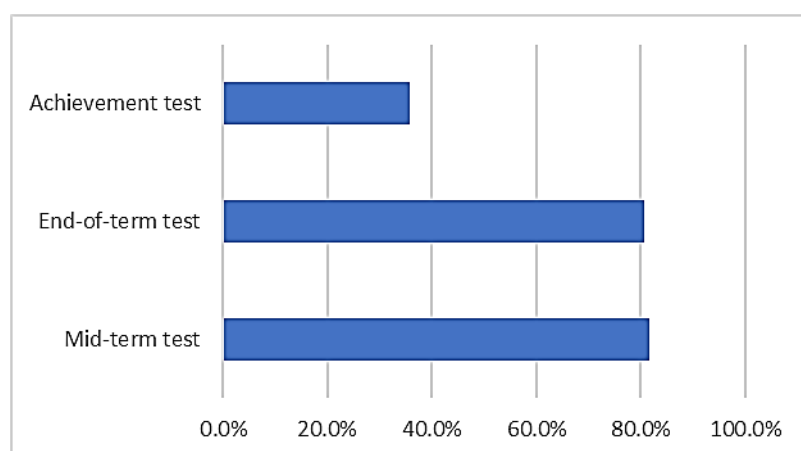


Figure 1. Online test purposes (N = 109)

In these tests, the most popular tool for test administration was Zoom. 77.1% of the test administrators and examiners revealed that they were usually asked to use this tool for online testing by their managers. Microsoft Teams (abbr.: MS Teams) ranks second, with 36.7% of the participants reporting its use. The other applications only account for a negligible percentage, with only 3.7% of regular users (Figure 2). Additionally, when involved in these online tests, a large number of participants observed that test takers were usually required to use a camera or webcam on the device on which they were taking the test (64.2%). Meanwhile, 39.4% mentioned the use of one camera placed perpendicular to the test taker so that the test administrator could see both the test taker and his/her working screen. 45.9% observed two cameras used, one of which was on the device used for the test and another perpendicular to the test taker (Figure 3).

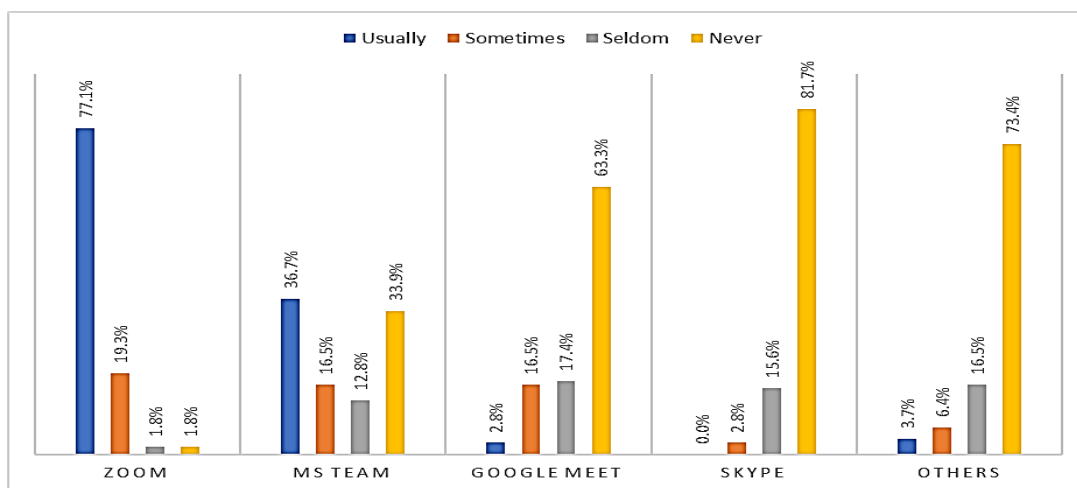


Figure 2. Tools for test administration (N = 109)

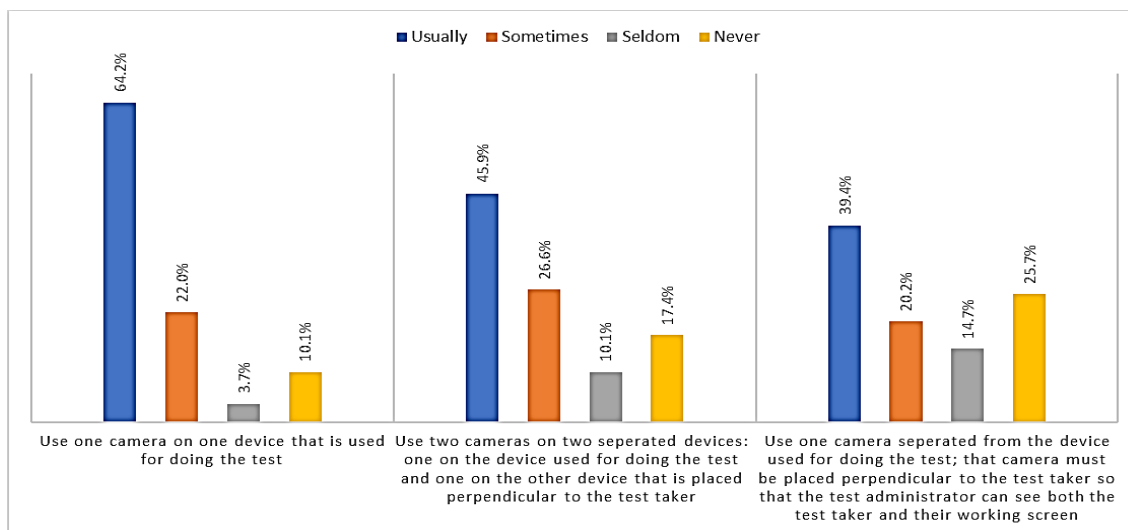


Figure 3. Camera use during the online test (N = 109)

As for the tools for collecting test papers (i.e., on grammar-vocabulary, listening, reading, and writing), Google Forms were utilized the most, with 63.6%, and 35.5% of the participants utilized Microsoft Forms (abbr.: MS Forms). An email was reported to be used by nearly 20% of the participants, while each of the other tools, such as Zalo and the like, and a learning management system (abbr.: LMS) account for less than 16% (Figure 4).

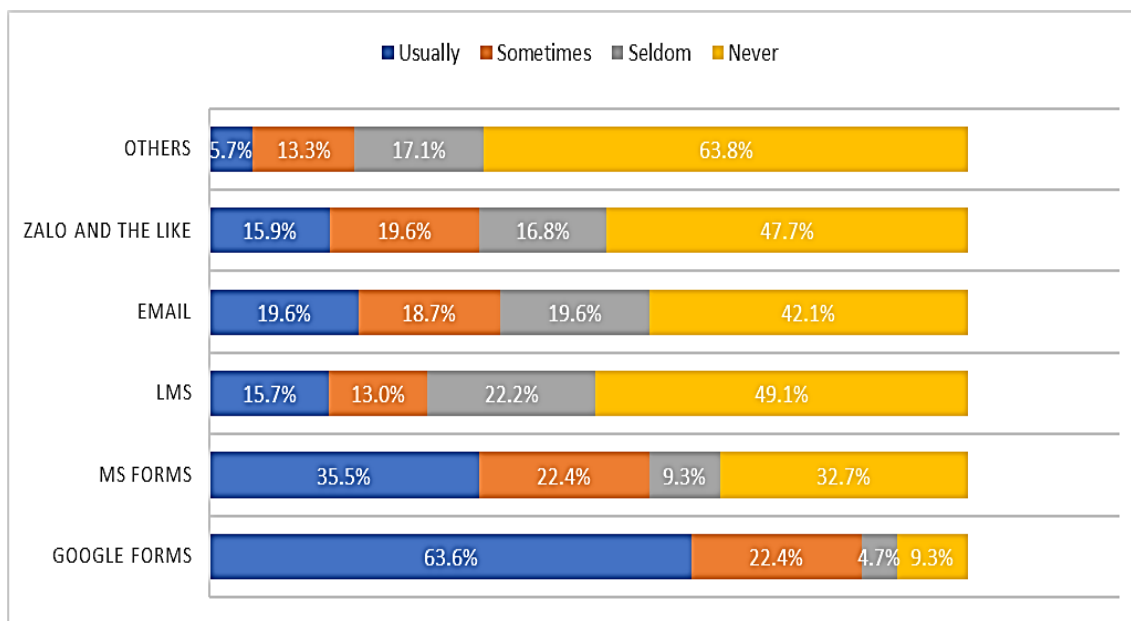


Figure 4. Tools for collecting test papers (N = 107)

Besides experiencing different tools for supervising test takers and collecting test papers, the participants mentioned how the listening test audio was delivered to test takers and how test takers submitted their writing papers. 58.7% of the respondents stated that test takers usually listened to the audio file embedded in the online testing platform (Figure 5). 13% of the respondents revealed test takers usually downloaded the audio file onto their devices. For the writing papers, 72.5% of the participants reported that test takers usually typed their answers directly on the forms; meanwhile, 23.4% and 29%, respectively, reported that test takers sent their typed and handwritten papers via another tool (Figure 6).

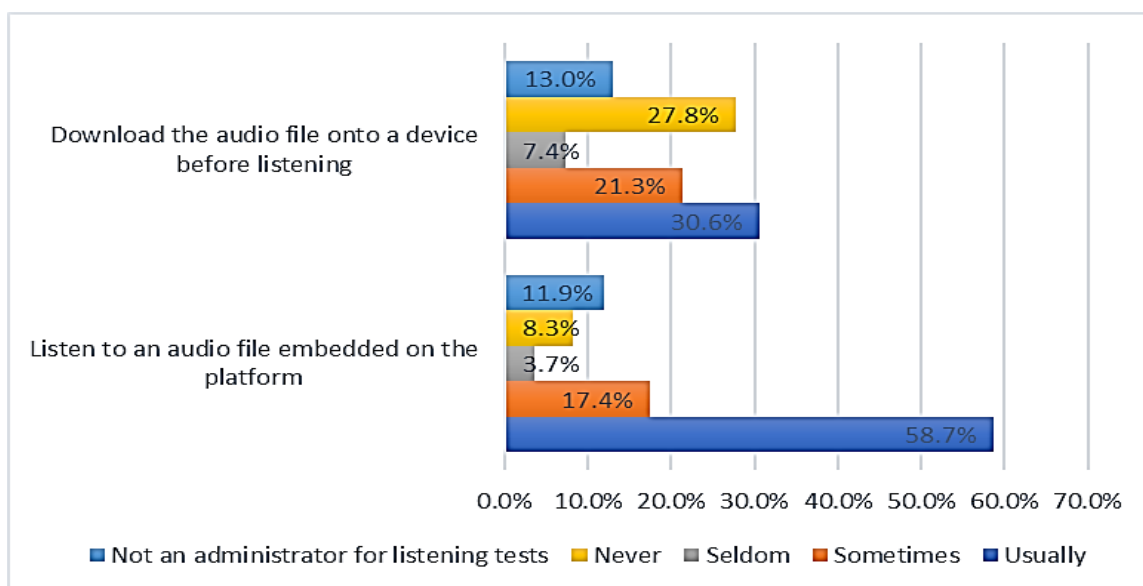


Figure 5. Use of the listening test audio (N = 109)

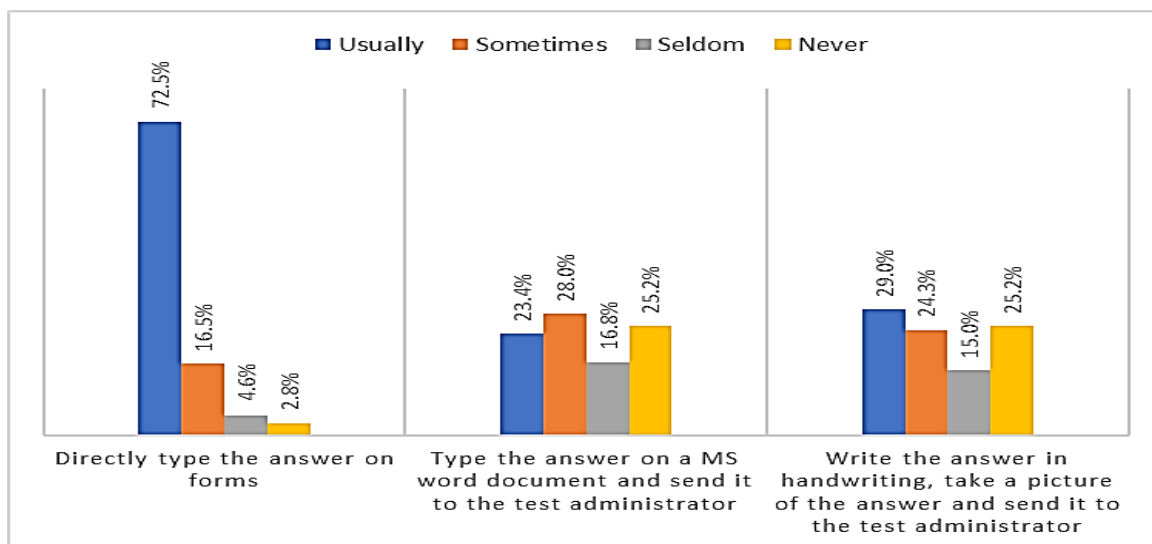


Figure 6. Submission of writing papers (N = 109)

Strengths of online language testing and assessment as perceived by test administrators and examiners

As shown in the data, a very large number of the participants agree and strongly agree with statements concerning the strengths of online language testing and assessment.

The first group of advantages is related to test takers' online performance. The percentage of participants that recognized these advantages ranges from 67% to 98.2% (Figure 7). Specifically, 98.2% of the respondents felt that the answers are clear and friendly for the eyes when they are typed. 96.3% shared the same opinion that it is convenient and time-saving for test takers to choose and change the answers. 92.7% recognized a useful function of the online platforms that allow test takers to see their results and answers instantly after they finish their test. In this aspect, the paper advocates what has been presented in a number of existing studies regarding the effectiveness of at-home exams, such as Dreher et al. (2011) and Demo (2009), and Hoang et al. (2021). Regarding mistakes of transferring their answers to the answer sheet, 90.8% of the participants agree or strongly agree that online testing can help test takers to avoid them. Regarding the advantages of doing the writing paper, keeping the interaction during conducting the speaking test, and using audio files, the percentage of advocates were 89.9%, 87.2%, and 82.6%, respectively. Noticeably, only 67% of the participants agreed that online testing prevents the test taker's answers from being copied.

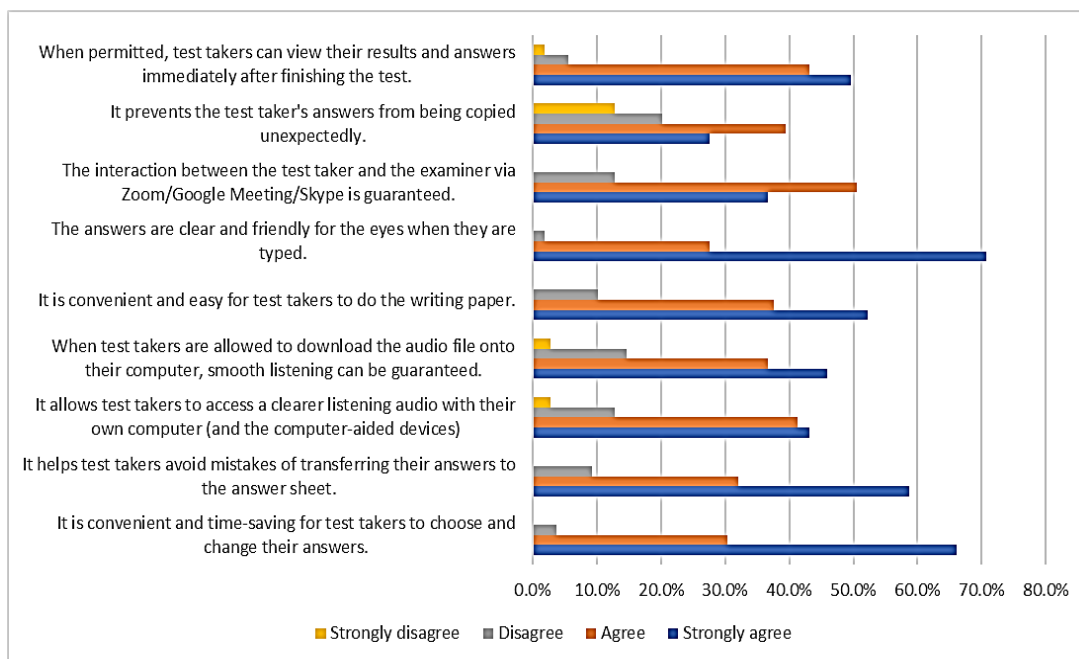


Figure 7. Strengths in test performance (N = 109)

The second group of advantages is related to the test administration process (Figure 8). The lowest percentage of agreement is 89.9%, corresponding to the flexibility in test administration time. The highest percentage of agreement, 97.2%, is associated with the flexibility in the test administration place, the friendliness to the environment, and the possibility of quick and convenient information updates. Additionally, more than 92% of the surveyed test administrators and examiners believe that online testing prevents situations of lacking or misdelivering the answer sheets and that it saves time, money, and effort for both test takers and the test administration itself. These results reflect what has been reported by Dreher et al. (2011) and Gehringer and Peddycord III (2013).

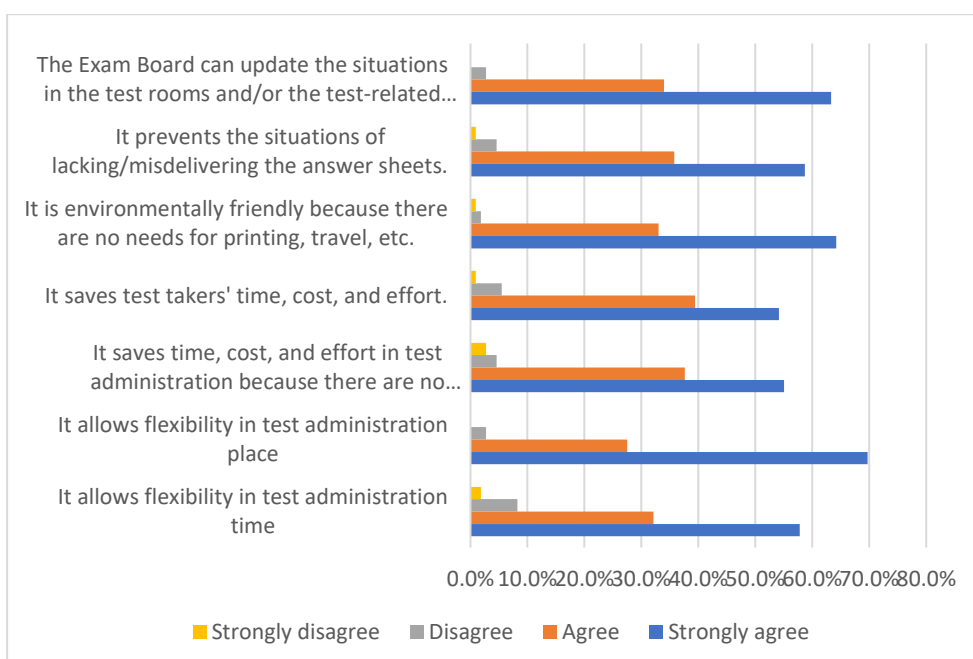


Figure 8. Strengths of the test administration process (N = 109)

The last group of advantages is related to the marking process (Figure 9). 100% of the respondents agreed that online testing allows flexibility in where test-marking occurs and that it is convenient for data storage and analysis. 99.1% also recognize that it saves time to mark multiple-choice test papers when the test is conducted online. The other advantages that are related to test-marking time, score-processing time, accuracy in marking multiple-choice tests, and accuracy in processing scores are also appreciated by more than 90% of the participants. This can be seen as part of the pedagogical benefits which Dreher et al. (2011) revealed.

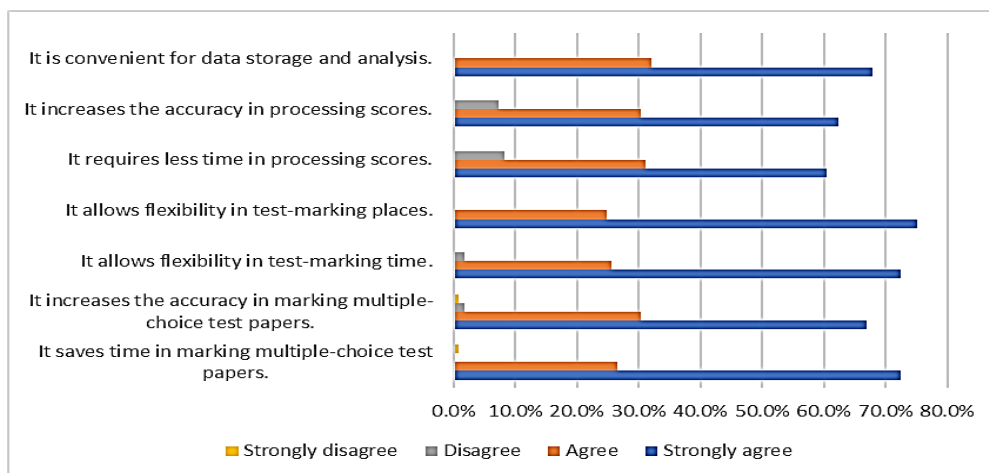


Figure 9. Strengths in the marking process (N = 109)

Besides sharing their agreement on the strong points of online testing in general, the test administrators and examiners also expressed their opinions on the advantages of an LMS over Google/MS Forms (Figure 10). Although only 65 out of 109 test administrators and examiners took advantage of an LMS, 95.4 % of all respondents felt that an LMS could help test takers avoid entering wrong personal information because their personal information is already entered in their accounts. 93.8% hold a belief that an LMS can record test takers' work in progress, avoiding the loss of their answers and preventing them from needing to start over due to a technical problem. Also, more than 80% indicated agreement on the appropriateness of an LMS for online testing as well as its ability to work well on diversified interfaces. Yet, only nearly 70% of the participants believed an LMS was better at restricting test takers from cheating.

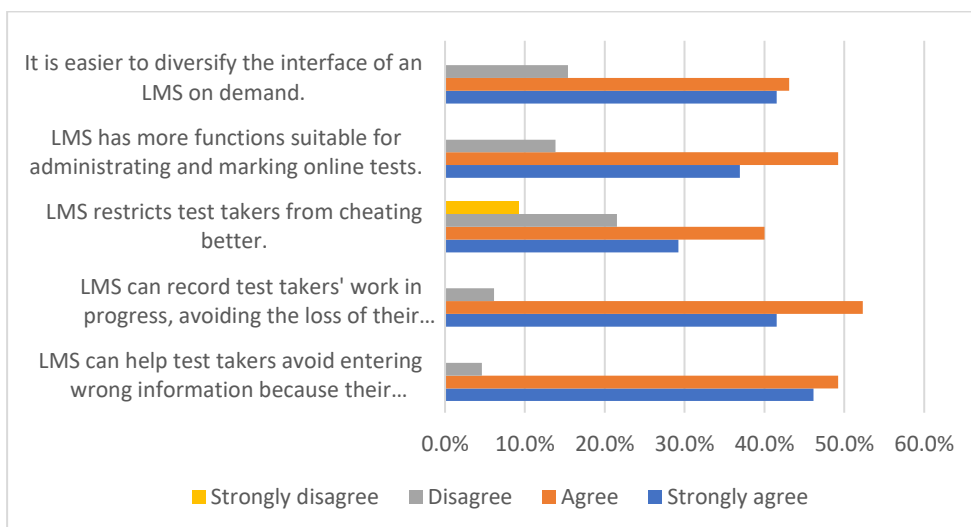


Figure 10. Advantages of an LMS over Google/MS Forms

Disadvantages of online language testing and assessment as perceived by test administrators and examiners

Test administrators' and examiners' opinions on the disadvantages of online language testing and assessment were also surveyed. The data show four groups of drawbacks: problems in online test performance, technical problems, problems in test security, and problems in the marking process.

Although a large number of the respondents agree on the advantages of online testing in terms of online test performance, many of them recognize the potential problems. Particularly, more than 90% hold the opinion that test takers may experience eye strain from looking at screens of electronic devices for a long time and that test takers may lose concentration and process information more slowly, especially with long documents. Likewise, approximately 90% agree on test takers' difficulty in reading the texts while scrolling up and down as well as in remembering the given information without taking notes or marking on the test materials. More than half of the respondents show their agreement on test takers possibly mistaking the test room and time (Figure 11).

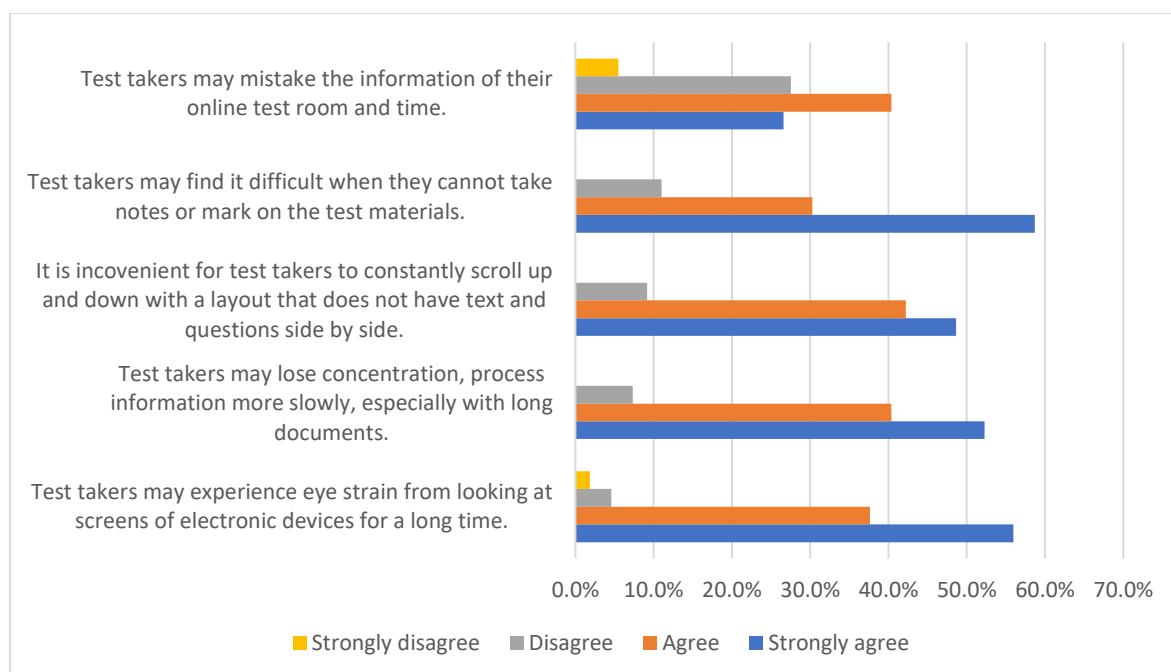


Figure 11. Problems in test performance (N = 109)

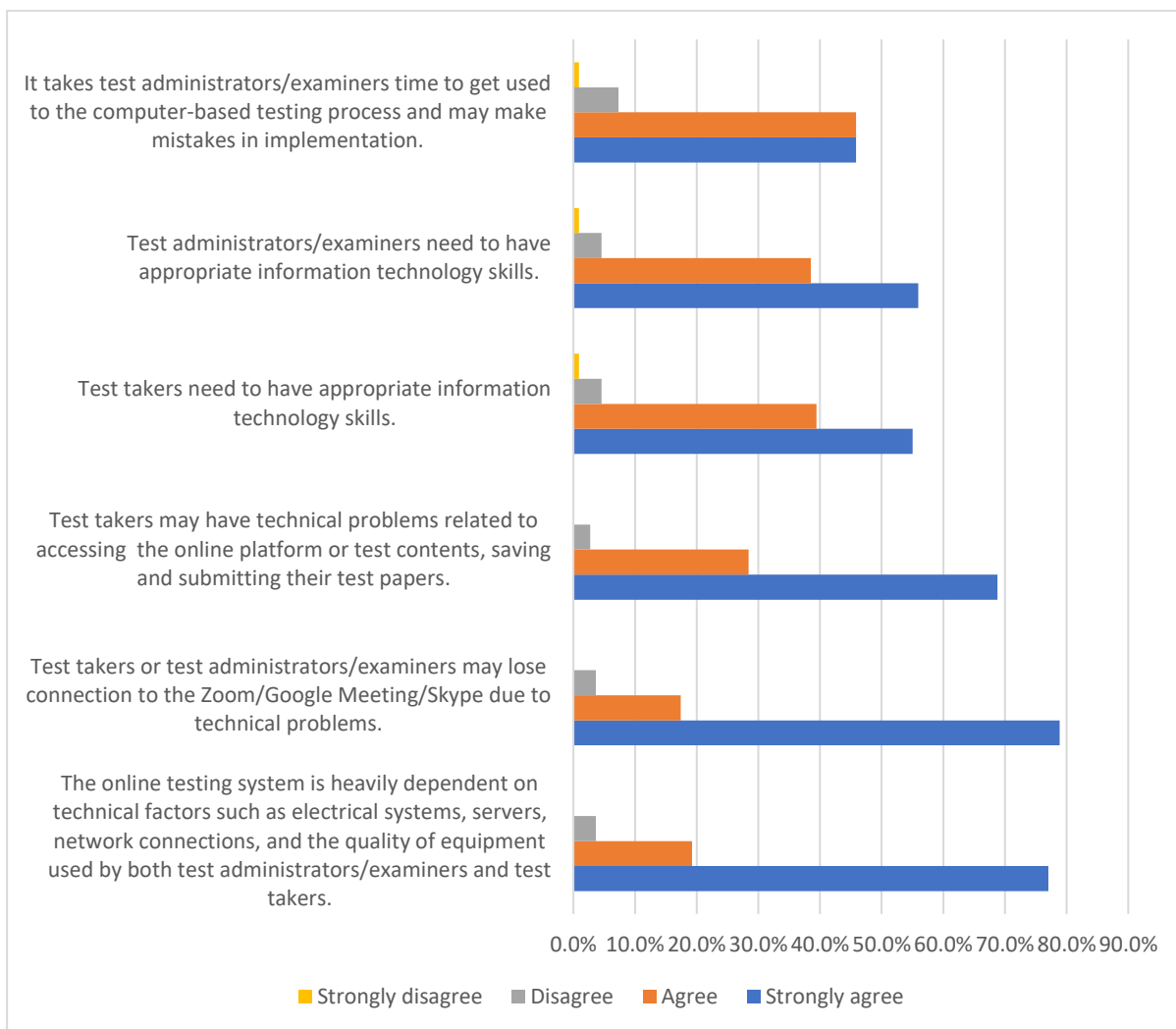


Figure 12. Technical problems (N = 109)

As can be seen in Figure 12, technical problems seem to be very common to test takers, test administrators, and examiners. More than 90% of the participants observed all of the mentioned problems in relation to technology. The most significant drawbacks are associated with the quality of the network, equipment, and testing platform, which accounts for more than 95% of the respondents. Nearly 95% of the respondents agree that if test takers, test administrators, and examiners are not good enough at information technology skills, they may meet challenges when they are taking and/or monitoring the test.

Moreover, the ubiquity and accessibility of technology may result in threats to test security (Figure 13). A great deal of the surveyed shared the agreement on the likelihood that test takers, test administrators, and examiners save and/or disclose the test materials/information illegally while a little control over this situation can be retained. Even though the respondents seem to show a stronger belief in test administrators and examiner's ethics, still around 80% agree on this possible risk caused by these stakeholders. The agreement is reached among more than 91% of the participants for the same threats posed by test takers.

What has been found in technical issues and test security supports the findings of Dermo (2009), Yulianto and Mujtahin (2021), and Hoang et al. (2021). That test takers, test administrators, and examiners are likely to be influenced by technical issues does raise concerns.

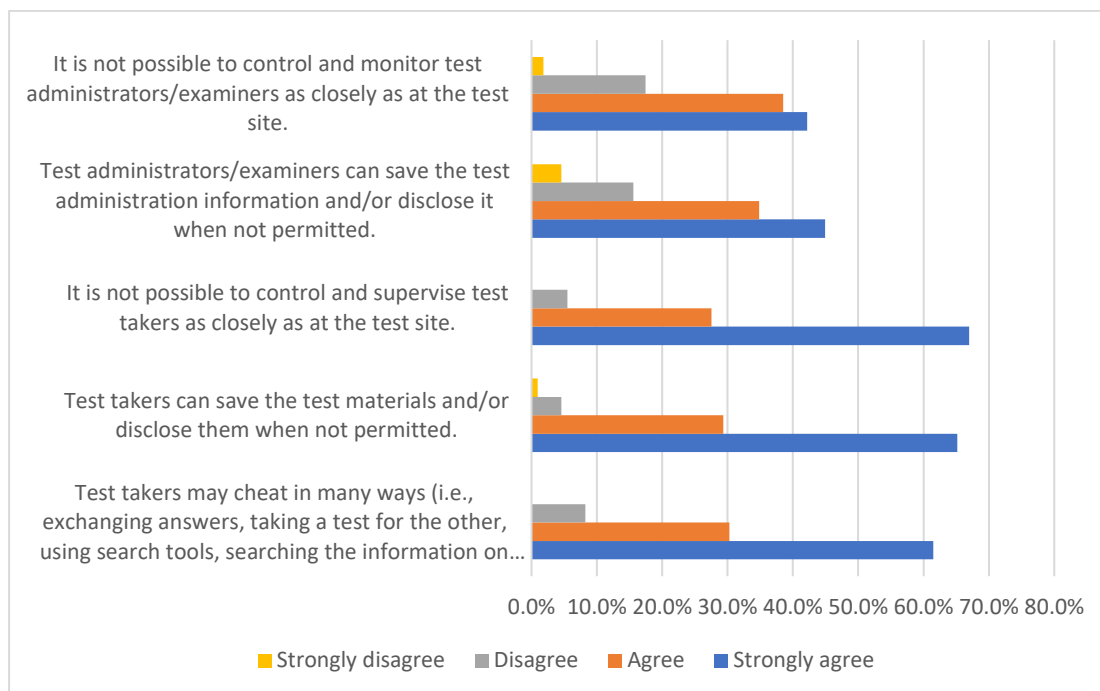


Figure 13. Problems in test security (N = 109)

Regarding the problems in the marking process, the respondents strongly agree or agree that the problems result from what examiners have to do with their devices while deciding on the marks (Figure 14). The highest agreement percentage (around 80%) is associated with the distraction writing examiners may suffer while reading and marking long essays on screen. A large number of the respondents (around 78%) also claim the heavy workload examiners may cover for online language testing and assessment as compared to that at a traditional test site. In online exams, examiners have been involved in not only the marking process as that in paper-based tests but also the administrative work such as entering and processing scores. The difficulty of speaking to examiners, which refers to listening to test takers' answers online and marking simultaneously, is shared by 65% of the respondents. The reasons may lie in the unstable network connection or the fact that speaking examiners have to supervise the test taker to prevent possible cheating during the test.

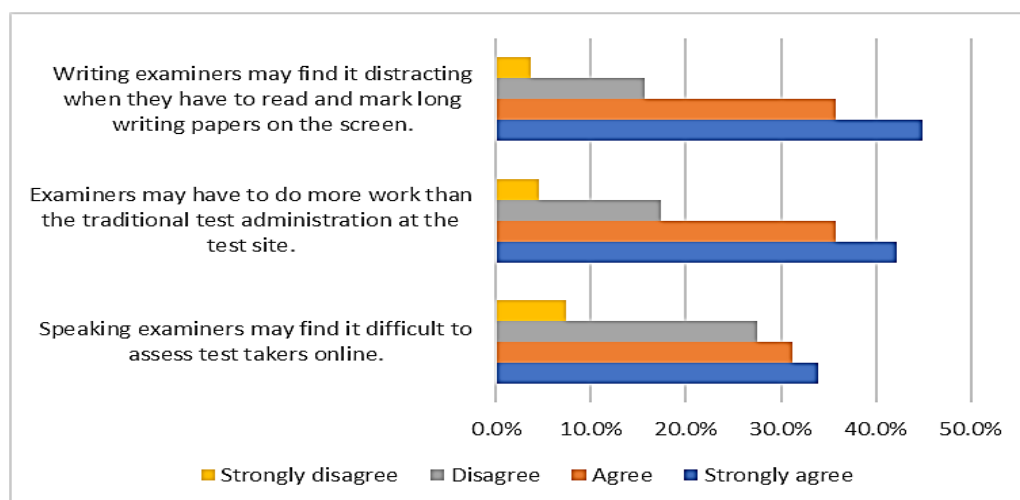


Figure 14. Problems in the marking process

Along with the above-mentioned general drawbacks of online language testing and assessment, the drawbacks of an LMS are shared by more than 85% of the respondents. Specifically, an LMS has a less familiar interface, which may take some getting used to, and an LMS is more prone to overload.

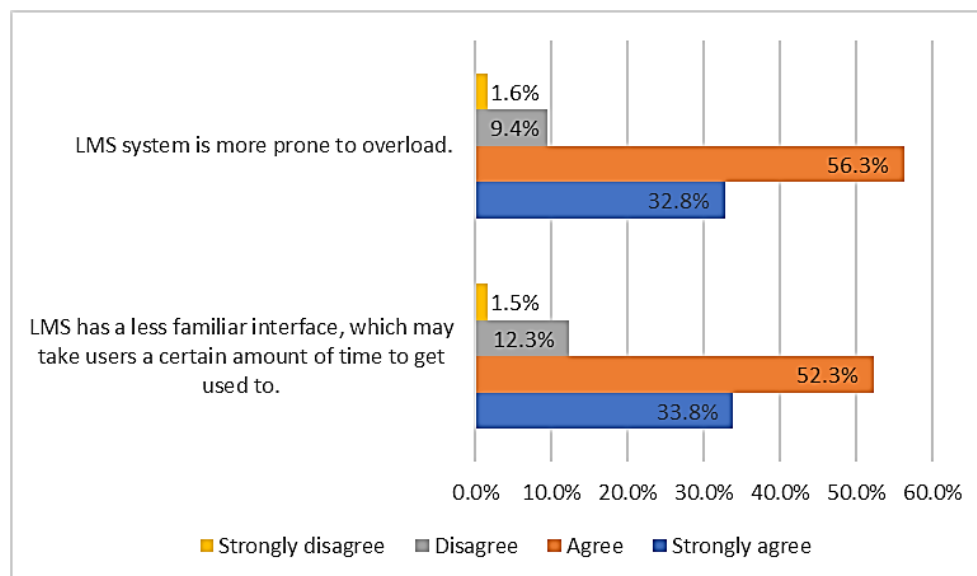


Figure 15. Drawbacks of an LMS (N = 65)

Discussion and Conclusion

During the COVID-19 pandemic, a number of significant tests, such as mid-term tests, end-of-term tests, and achievement tests as an outcome requirement for school and university students, were administrated online, thanks to which test takers may stay at home taking the tests. The survey data reveal that the most common tool used for online language testing and assessment was Zoom and the second most popular tool was MS Teams. These are simple and familiar applications useful for various purposes but not typical applications for the aim of online testing and assessment.

With regard to the strong points of online language testing and assessment, a large number of the surveyed test administrators and examiners admit the advantages in all major aspects, including test takers' online performance, test administration process, and marking process. Besides, these participants also admit the risks that online language testing and assessment may bring in terms of test takers' online performance, technical dependence, test security, and the marking process. The findings mostly support what has been presented in the previous papers in the literature review. It can be seen that both advantages and disadvantages are in respect of online test performance (involving and/or caused by test takers) and marking process (involving and/or caused by test administrators/examiners). This scenario also poses a question of how to maximize the positives while minimizing the negatives of this practice so as to create a reliable environment in language testing and assessment, even though it is virtually arranged.

Moreover, the development of an LMS in a school or university has been promoted in the hope that it will well manage the learners' studies as well as the test administration process. During the pandemic, it proved to be a tool for online testing and assessment, and via this preliminary survey, opinions from test administrators and examiners on its benefits and drawbacks were collected. The findings contribute to a better understanding of how or whether an LMS is useful.

Like the approach to online testing and assessment, the use of an LMS also has advantages and disadvantages. This requires educational managers to make a good decisions on what and how to use available and/or established tools for specific purposes.

These findings can serve as evidence of how technology plays its role in a critical period of the whole society. The findings are also likely to help test administrators, examiners, and educational managers are aware of online tools' positives and negatives and how to exploit the tools for better results in a general context, not only during the pandemic. On the other hand, more research on online language testing and assessment is essential to have more evidence based on which the practices can be improved. The next stage of the study can further explore test administrators' and examiners' experiences, in which test administrators and examiners can share the strengths and drawbacks of computer-based assessment they have experienced in reality. The same approach can be applied to study the opinions and experiences of various stakeholders from different rural and urban areas in diversified contexts, and more data collection methods can be employed (i.e., questionnaire, interview, or focus group discussion). Such further studies will possibly contribute to the landscape of online language testing and assessment in Vietnam.

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Teachers' Perspectives on the Flipped Classroom (FC) at Tertiary Education

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ABSTRACT

Keywords: flipped classroom (FC), benefits, perspectives, challenges

The combination of virtual learning with classroom-based instruction as an innovative method to enhance students' learning in active practice has attracted ample interest from researchers and practitioners in the field of second language learning. Several previous studies have elucidated students' perceptions of the benefits and challenges of attending the flipped classroom (FC). Nevertheless, the ones addressing instructors' perspectives on the flipped classroom model and practice, especially in the context of English language teaching at the tertiary level in Vietnam, were scattered, flimsy, and inconclusive. Thus, a case study approach employing a questionnaire, interview, and observation investigated teachers' perceptions of the FC in tertiary education. An in-depth interview following a questionnaire that was delivered to 40 teachers at a foreign language faculty was conducted to have more valuable details about the advantages and disadvantages of the FC, while several observations were conducted to see how FC is applied in practical teaching situations. The findings clearly showed that the majority of the instructors were in favor of the FC model despite visible challenges. As long as these prerequisite requirements had to be taken into account - students' preparation at home, time expansion for active practice, and teachers' huge effort in preparation, a successful FC was reachable.

Introduction

Amid the spread of technology all over every facet of the world, education has perceived blended learning as the new breeze of the digital era. Traditionally, learning and teaching have always occurred in brick-and-mortar schools with direct interactions between peers, teachers, and students. However, everything is now changing with the intervention of different approaches to increase student achievement.

Focusing on student achievement, educators and researchers have been searching for different methods to transition from a traditional teacher-centered to a student-centered approach with the hope of addressing students in such a very active learning atmosphere. Teachers need to adopt or modify strategies to be appropriate to different targets of students, as there is not even

one way to deal with each or every student. The FC might be a potential solution, which can bring a series of traditional activities done outside the classroom inside and vice versa. For the most part, the flipped classroom triggered self-study and enhanced students' academic achievement.

Literature review

Defining the FC

The FC instructional strategy, also called the inverted classroom, is described as reducing lectures and increasing collaborative activities (Millman, 2012). The FC is primarily employed to transmit in-class instructions out by watching a recorded video or prepared slides and doing homework assignments before showing up in class, and this also generates active and collaborative learning for students in the classroom (Nguyen, H.A.V., Choon, K.T., Lee, K.W., 2018) or basically, it is "to deliver the teacher's lectures before class through online videos, in order to free-up the in-class time for active learning and problem-solving activities" (Lo, C.K., Hew, K.F, 2017).

The FC considerations and limitations

The first advantage of the FC is the focus on a student-centered approach, which enables them to learn and complete the assignments on their own (Millman, 2012); Bergman & Aaron, 2012; Elaine, K., Mira P., Jonathan, S., & Howell, R., 2018); and it motivates teachers to design the learning activities in order to help students actively possess comprehensive understanding.

The second significant benefit that was generated in the process of flipping the classroom is to enhance students' academic achievements, helps students achieve better performance during the intervention (Johnson & Renner., 2012; Huang, YN., Hong, ZR., 2016; Shao, M., and Liu, X., 2021; Nguyen, N.Q., Lee, K.W., Szabo, C.Z., Nguyen, N.P.D., 2021)

Students' satisfaction exposed to the FC was later counted on in some studies. A cluster of teachers and educators all affirmed that their students left positive comments on the use of this approach and even recommended using it in other subjects due to its benefits (Davies, Dean & Ball, 2013; Ahmet Başal, 2015; Talan & Gulsecen, 2019; Nguyen, T.T., 2021).

Additionally, this approach was affirmed to stimulate students' creativity (Nguyen, N.V. & Le, M.T., 2017) or cherish their learning attitudes and behaviors (Tran, V.H., Mohan. Yellishetty., Thanh, N.T., Arul Patil., Le, T.H., 2017).

However, the FC has some limitations: low-quality video lectures (Milman, 2012; Bergmann & Aeron, 2012); the availability of irresponsible students to watch the video (Milman, 2012), many distractions during the watch (Milman, 2012; Nguyen, H.A.V., KT Choon., K.W. Lee., 2018; Bergmann & Waddell, 2012); and insufficient support for student understanding (Milman, 2012).

Why should we flip the class?

The FC sets foot on teaching and has been transforming our teaching practice. The teacher stops standing for a long time on stage and delivers lectures with the participation of students as good

listeners. The radical change inverted the roles of teachers and students, and vice versa, allowing us to take advantage of potential benefits and minimize the weaknesses of traditional approaches. Significantly, according to Bergman & Aeron (2012), the benefits obviously outweigh the drawbacks, leading to their widespread application throughout. Below are some significant advantages of the FC published in the book "Flip Your Classroom" by two authors, Bergmann & Aeron (2012).

Table 1. Why we should flip class (Bergmann & Aeron, 2012)

Advantages	Explanations
✓ Flipping helps busy students	The flexibility of the videos or materials
✓ Flipping helps struggling students	The majority of teacher attention goes to who need the most assistance
✓ Flipping allows students to pause and rewind their teacher	A chance to process the speed of the videos or materials to be the most appropriate with each individual.
✓ Flipping increases student-teacher interaction	Face-to-face instructional interactions or personalized support to students Tutor or mentor roles are far more applied than delivering the lecture.
✓ Flipping increases student-student interaction	Collaborative learning and active learning are most conducted.

Research Questions

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

1. How is the FC implemented in English classes at the university of Finance and Marketing?
2. What advantages and disadvantages do the teachers have during the implementation of the FC?

Methods

Pedagogical Setting & Participants

The study was conducted at the UFM Foreign Language Faculty of the University of Finance - Marketing, which has more than 40 lecturers, including tenured and visiting lecturers.

The 40 teachers who participated in the study were all from the UFM Foreign Language Faculty. First, all 40 teachers have had at least one year of teaching experience at tertiary institutions. Among them, 10 teachers spent the longest time working, more than 14 years as English lecturers at UFM university, while 10 were the least experienced teachers within 1 to 3 years of teaching and the rest smacked in the middle. All of them acquired a Master of Arts in Applied Linguistics and TESOL.

Table 2. Description of teachers' information

Group	Number of teachers	Years of teaching English	Language teaching area
1	10	Less than 14	Basic English and ESP
2	20	From 5 to 13	Basic English and ESP
3	10	Less than 5	Basic English

Second, three teachers anonymously answered the interview with extensive data, which was extracted from different groups of teaching experience: one from the ultimate group of more than 14 years, one from the middle group between 4 and 10 years, and the last one from the least experienced group of fewer than 4 years.

Table 3. Interviewed and observed teacher participants

Teacher's code	Years of teaching English	Class in charge	Materials	Proficiency language level	Age	Gender
T1	12	General English 6	Complete IELTS	B2	44	female
T2	7	General English 4	Personal Best	B1+	35	male
T3	2	General English 3	Personal Best	A2	26	female

Design of the Study

By means of studying 3 separate classes, the researcher aimed to gain a holistic picture of the use and effects of the flipped classroom in UFM language faculty. The study was developed as a case study, which was defined as "an in-depth exploration of a bounded system (e.g., an activity, event, process, or individuals) based on extensive data collection" (Creswell, 2002, p. 485). This approach is fitting for this study because it effectively "investigates a contemporary phenomenon in depth and within its real-life context" (Yin, 2009). According to Creswell (2002), intrinsic, collective, and instrumental cases are three types of a case study. Among them, the collective case study is designated as the most appropriate with the current study because it "provides detail and explanation regarding a situation, phenomenon, or experience where individual studies provide information to investigate the issue".

Research instruments

To seek out answers to the two stated research questions, the researcher employed three instruments: survey, observation, and interview.

Observation

In order to answer RQ1 on how the FC has been applied in English classes, three class observations were conducted in brick-and-mortar classes with very great assistance and permission from the class teachers. The researcher contacted the teacher participants to conversationally ask for which room and which campus to observe the chosen classes. The researchers showed up 10 minutes before class started so as to avoid their attention and disturbance caused by the sudden strangers' presence. They also chose a very far back row to best observe both the teacher's and students' activities during class time. These minor arrangements and plans would help minimize students' nervousness and distractions to get involved in class activities, ensuring the study's subjectivity.

Survey

The 18-item questionnaire (appendix 1) was adapted from the original design of E. Gough, D. Dejong, M. Baron & T. Grundmeyer (2017) and is mainly based on Bergman and Aaron's theory to discover the advantages and disadvantages the teachers encountered during the implementation of the FC on the second RQ. To be more appropriate for the current study, the researcher adopted the questionnaire and, to some extent, modified it. Three separate parts were included to identify different angles of the teachers' perceptions of the pros and cons of the FC: (1) How masterful are the teachers in the implementation of the FC?; (2) What advantages do teachers have while using the FC?; (3) What disadvantages do teachers encounter during the application of the FC?.

The first three were closed-ended questions to figure out how masterful the teachers are in terms of the use of the FC in their teaching profession and the primitive thoughts or perceptions on whether the advantages outweigh the disadvantages. Subsequently, the 2nd and 3rd sections to the greatest extent, lay stress on what pros and cons the teachers have encountered during the application, employing the 5 Likert-scale responses from "strongly disagree" to "strongly agree". The questionnaire was then brought to an analysis by using Excel.

By collecting the responses more technically and effectively, the researcher delivered this online by using the Google Docs.com platform, which really excels in distributing the survey and compiling the advancement of data collection.

Before officially distributing the questionnaire to the participants, the researcher had conducted one pilot to check the validity and reliability of each item in the questionnaire. Ten participants were politely requested to enter the pilot.

Table 4. Reliability Statistics

N of items	N	Cronbach's Alpha
18	10	0.76

Cronbach's Alpha reached 0.76, provings that all of the items in the questionnaire were highly accepted and proceeded to the official data collection of the study.

Interview

To get teachers' in-depth opinions about the advantages and disadvantages of applying the FC, an interview with five open-ended questions was conducted with the participation of three teachers from three different English classes in the UFM Foreign Language Faculty. The teachers were coded as T1, T2, and T3, as shown in table 2, and they were interviewed based on their convenience of time and location. Because teachers have to travel among different campuses, T1 and T3 cordially agreed to have a face-to-face interview, whereas T2 recommended filling up the interview online using the MS Team platform. The researcher audio-taped these interviews to avoid missing the information and keep the conversations going smoothly. As an act of respect to ethical research principles, all participants were informed that their participation in the study was totally anonymous and confidential.

The data collected from the interview was then analyzed in themes, aiding in the triangulation of all the sets of data.

Data collection & analysis

To answer the two research questions, the researcher utilized a descriptive statistical method with thematic analysis for the interview. Research question one was answered by mainly collecting data from the observations and the interview, while research question two calculated means and standard deviation in combination with some in-depth responses from the interview.

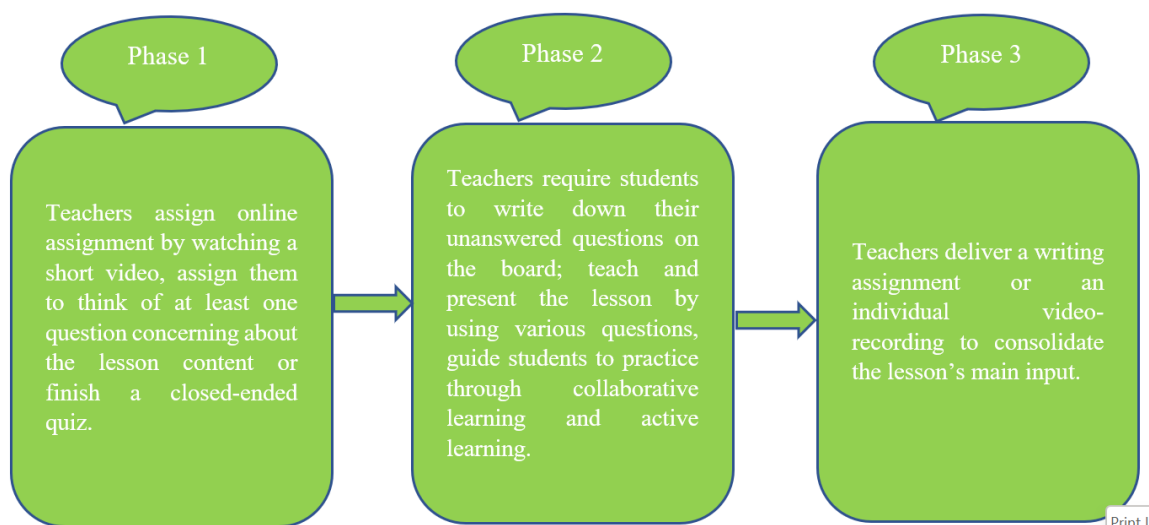
Results/Findings and discussion

Research question 1: How is the FC implemented in English classes at the university of Finance and Marketing?

According to the data collected from a series of observations in three English classes and information from questions one and two in the interview, a four-period lesson was broken down into three primary stages.

Figure 1.

Conducted Phrases in The Flipped Classroom



Phase 1: Teachers assign online assignments by watching a short video or sending slides and then assigning them to think of at least one question concerning the lesson content or sometimes finish closed-ended quizzes.

All three teachers admitted that they favor sending slides rather than making their own videos, covering all the lesson's main points in combination with the textbook as a very significant step of preparation at home. Two-thirds of teachers take advantage of slides to send to students, while T3 one admitted to designing his own video for his flipped classroom.

Phase 2: Teachers require students to write down their unanswered questions on the board, teach and present the lesson by using various questions, and guide students to practice through collaborative learning and active learning.

T3 let students finish a short paper quiz prepared and collected after 5 minutes. The assignment is not as simple as ordinary homework but much more involved with subsequent examinations or inquiries. In line with rewinding the out-of-class videos or slideshow, each student was pushed to have at least one question written down on the board regarding their curiosity or unanswered problems that remained in the dark and needed more teachers' explanations or instructions.

In line with the availability of written questions, the teachers categorized them into distinctive portions streaming with the lesson's input. Then, they implicitly explained and presented each of the following collaborative learning activities for students. After collaborative discussions, students presented what they got and understood about the emerging issues raised on the board. Shortly thereafter, the teachers provided direct confirmation of their proper understanding.

All teachers designed a list of questions and problem-solving topics clearly shown on PowerPoint slides and handouts to promote more general practices with respect to the lesson in the target language. More importantly, the most striking feature of this approach was that it immerses students in very open and active learning. While several groups of students were working in their target languages in the process of assignment completion, the teachers freely walked down the alley and stopped by some individuals or groups that actively raised their concerns or questions, or sometimes they sat by some low-competent students who had struggled with the assignments or remained much too silent in class to give them assistance in deed.

Phase 3: Teachers deliver a writing assignment or assign online homework on the Richmond Learning Platform

UFM Foreign Language Faculty has been used to support teaching and learning on some specific subjects on the basis of using the textbook "The Personal Best". The Richmond Learning Platform contains tools and functionalities for teachers and students. Teachers can easily assign homework for students without any paper-based tasks and then correct and assess their work directly on the Platform with the correct task percentages.

At the end of each lesson, it was observable that the teachers paid careful attention to homework assignments by either writing a topic-based essay or just finishing an online assignment on the

Platform. These practices aimed to consolidate and deepen students' understanding of specific key language points.

According to the set of observations, the researcher found some basic roles extracted from all three observed teachers, and they are fully described in the table below:

Table 5. *Teachers' and students' roles in the FC*

Stages	Teachers' roles	Students' roles
Pre-class	Record short videos or slides and prepare textbooks Upload videos on Youtube and send students the link to access them. Send prepared slides to students to read and read the textbook Design a brief quiz to track students' learning outside of the classroom	Rewind the videos and cram-prepared materials to get the lesson's main input. Think of at least one question to ask teachers or peers before class. Finish the quiz about what they have learned.
During class time	Instruct students to answer their own questions and others. Group students to solve the question collaboratively. Implicitly answer the questions on the board. Give the outline of the lesson and pay attention to important points to help students grasp the whole. Correct exercises with feedback and mark their work. Deliver a set of questions based on the lesson and then let them work on that with peers. Flexible movement around to help students if needed.	Write down their own questions on the board. Collaborate with their peers to tackle the questions. Perform their answers to show their group work with everyone Listen and take note of necessary language points. Actively discuss the exercises with peers. If needed, ask for help from teachers for clarification and explanations.
After class	Set mini homework: write a short essay or do an online workbook	Work on the assignments to review the lesson.

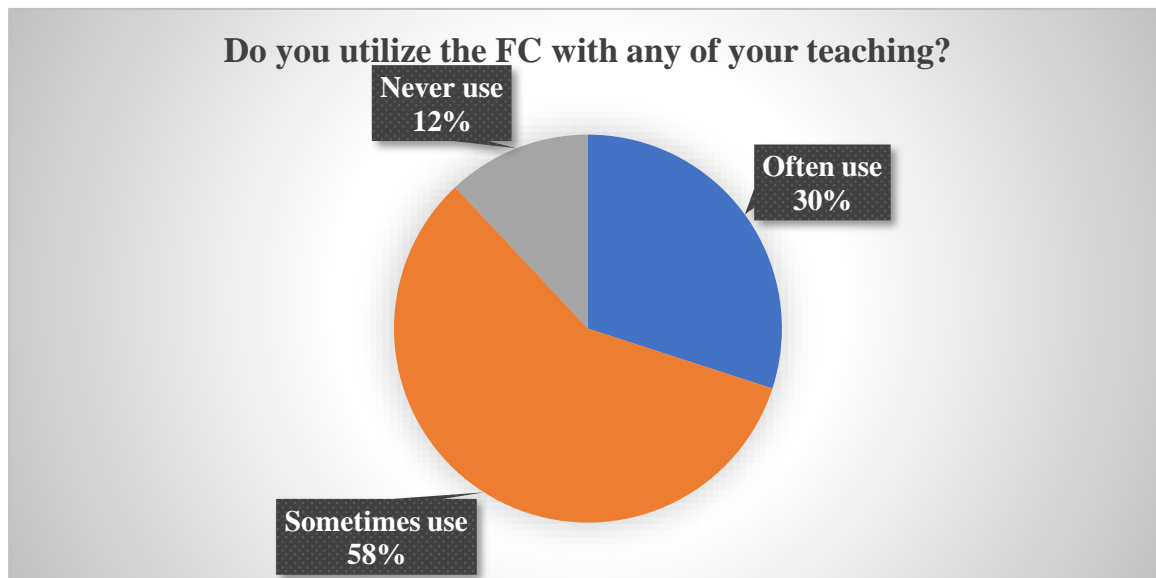
Research question 2: What advantages and disadvantages do the teachers have during the implementation of the FC?

Survey data and informative in-depth interview

Quantitative data collected from the questionnaire was used to explore teachers' perceptions of the flipped classroom on the point of responding to research question 2. The first construct, illustrating the frequency teachers apply the FC in their teaching, was exposed in charts through the use of percentages on Excel, whereas the entire eleven questions covering constructs 2 and 3 were presented in the form of calculating the mean and standard deviation of the participant's responses in the tables below:

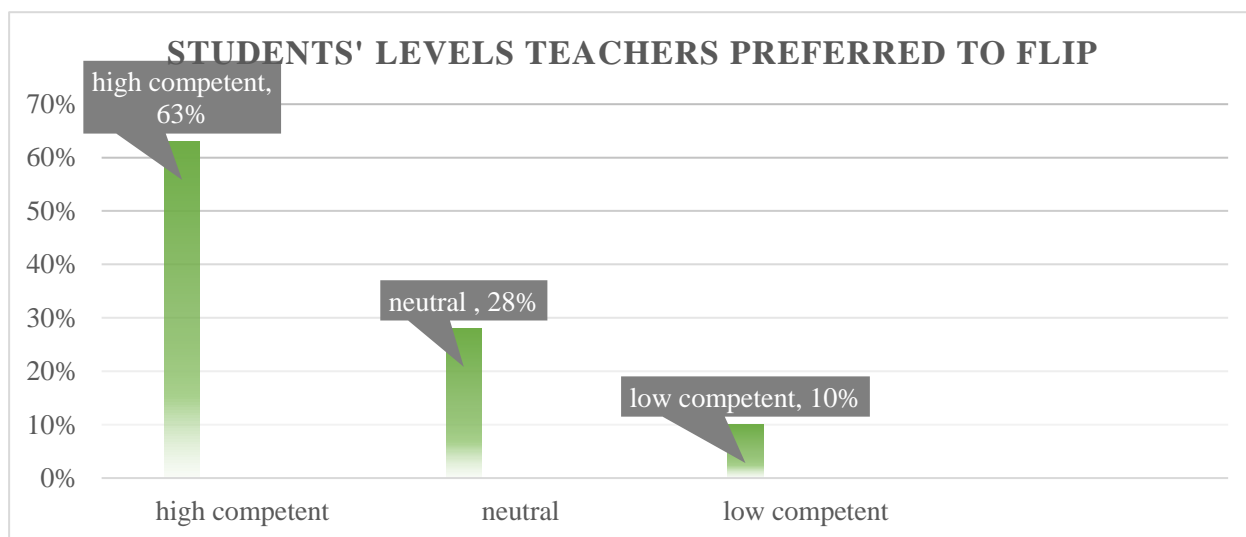
How masterful the teachers are in the application of the FC

Figure 2. *The frequency of using the FC in teaching by teachers*



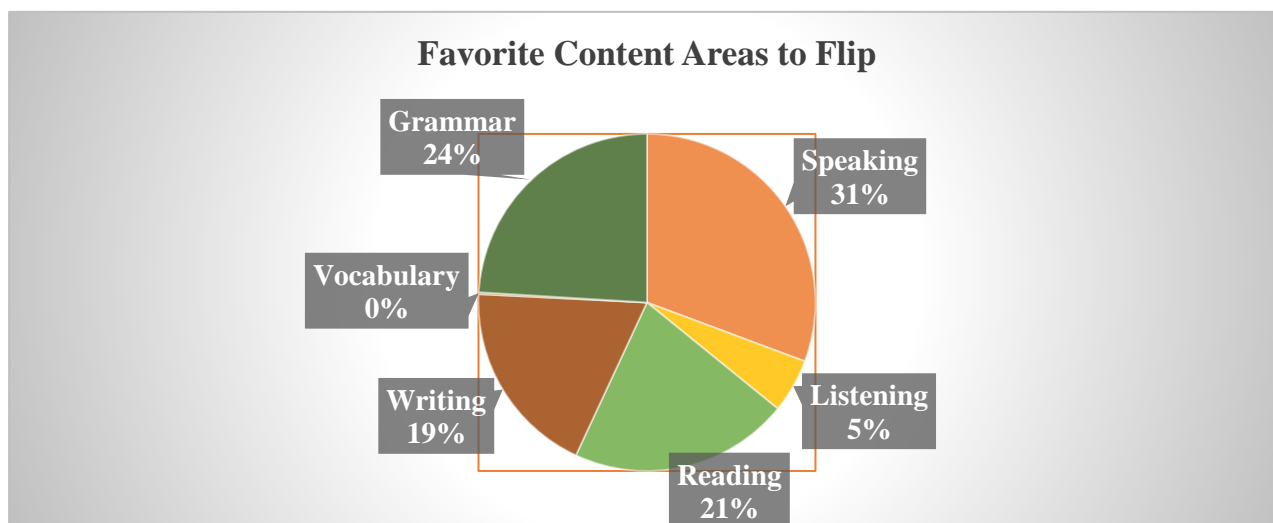
As illustrated, 30 percent of teachers admitted to frequently implementing the FC in their teaching, while 58 percent had done so at least once. These figures made it possible to conduct the subsequent questions and steps in the study.

Figure 3. *Levels of proficiency are preferred to apply the FC*



It was clear that most teachers preferred applying the FC to highly competent students because of its appropriateness and advantages. Specifically, T2 admitted that "it seemed much easier to apply active learning and free discussion with better competent students." at times, the proportions for the two other target students are 28% and 10% for neutral and low-competent students, respectively.

Figure 4. Favorite language content areas teachers preferred to flip



Pick-up content areas received little significant difference from teachers, who indicated that their favorite skill to apply the FC is speaking (31%), while grammar and reading received 24% and 21%, respectively. The teacher participants indicated less interest in writing at 19% and listening at 5%. To be more specific, T1 said, "I like to conduct speaking in the FC for the sake of taking advantage of interaction and oral discussion among students and even between me and some individuals." Similarly, T2 indicated that "With grammar, I often allow them to read materials and watch some tutorial videos at home and then let them discuss the usage and structure more in class with their peers. I can move around and instruct them more if necessary."

The advantages teachers have during the FC implementation

The second construct revealed the advantages of the FC to teachers. However, the researchers categorized them into thematic groups to address teachers' perceptions. To gain a better understanding of this aspect, three main themes were coded and categorized.

Table 6. The main themes related to the advantages

Themes	Items
Teachers' perceptions of conceivable benefits for inattentive students	4, 5, 6, 7
Teachers' perceptions in associated with increasing interactions during class time	8, 9, 10, 11, 12
Teachers' perceptions are associated with students' preferences.	13, 14

Table 7. *Teachers' perceptions of conceivable benefits for inattentive students*

Items	Statements	Mean	SD
4	The flipped classroom is beneficial to busy students	3.98	1.83
5	Low-competent students benefit from the flipped classroom	4.35	1.97
6	The flipped classroom allows students to learn at their own pace	4.23	1.93
7	Students are able to rewind the lectures if they do not understand	4.09	1.78

Table 7 gives a summary of the means and standard deviation of the conceivable benefits for students in the FC (RQ2) in terms of supporting busy and low-competent students and allowing them to self-pace learning. Teachers voted most strongly in favor of benefiting low-competent students ($M = 4.35$) and making it open for all students to access without limitation, so they can learn or relearn as many times as they wish ($M = 4.23$). Evidentially, one teacher coded T3, said, "*low-competent often tells me that they rewind the video many times until they understand the lesson, and it is worth doing that.*"

Table 8. *Teachers' perceptions in associated with increasing interactions during class time*

Items	Statements	Mean	SD
8	Students experienced more peer interaction and collaboration than in the traditional classroom	4.52	2.04
9	Students have a chance to work in collaboration	4.15	1.82
10	Teachers can remove passive learning from class	3.38	1.65
11	More teacher-student interactions were created during the flipped classroom	4.12	1.88
12	Teachers are able to personalize their instructions and scaffolding to students	4.49	2.01

Table 8 summarizes the means and standard deviations of the increase of interactions in the FC as one of the advantages. A great number of teachers agree with the possibility of giving more peer interactions ($M = 4.52$) and teacher-student interactions ($M = 4.12$) for all. Furthermore, teachers admitted that they were able to scaffold or assist those who had more difficulties in learning than others ($M = 4.49$). It was even more interesting when T1 mentioned, "*It is really surprising to me when I have more individualized free time to move around and take a glance at some students in trouble-solving exercises with their peers.*"

Table 9. *Teachers' perceptions of students' preferences for the FC*

Items	Statements	Mean	SD
13	Students preferred the flipped classroom to traditional approaches	4.18	1.89
14	Students learn better in the flipped classroom	3.95	1.76

A considerable number of teachers agreed that their students clearly preferred to learn English in the FC (M = 4.18). It was also confirmed that "I can see my students have better performance in exercises" (T3). Table 9 provides a summary of the means and standard deviations associated with students' preferences in the FC.

The disadvantages teachers have encountered during the applications of the FC

The third construct exposed the disadvantages of the FC that teachers encountered during the application. From the descriptive statistics and coded interviews, two main themes were extracted below:

Table 10. Thematic groups to expose the disadvantages of the FC

Theme	Items
Technology accessibility	15, 16
Overwhelming workload	17, 18

Table 11. Problems of technology accessibility

Item	Statements	Mean	SD
15	Students meet difficulties accessing the video or materials due to technology problems	1.86	.82
16	Teachers can ensure that the students are access to the video	2.89	1.31

Table 11 summarizes the means and standard deviation in relation to the difficulties students and teachers face when accessing the materials. It was not too difficult for students to access videos or at-home materials (M = 1.86), while teachers had some invisible struggles to confirm whether students really worked on their assignments before class (M = 2.89). Clearly, several coded teachers responded, "*I am not sure how many times or how much students really watch and learn the at-home assignment before class*" (T1) and "*to know whether students are accessible to read the slides or watch a video is still questionable to me*" (T3).

Table 12. Overwhelming workload

Item	Statements	Mean	SD
17	Teachers have too much workload to record their own videos	4.06	1.85
18	Teachers need to work hard to edit the videos	4.03	1.8

Two types of disadvantages were illustrated in table 12 received so much agreement from most teachers in terms of up-to-ear workload (M=4.06) and creating videos as at-home assignments

(M=4.03). Obviously, T2 said, *"It takes me so much time to complete a video, so I often choose to send slides to students instead"*.

From observations and questionnaire data collection, it was uncovered that the flipped classroom brought a number of benefits that accommodate the process of learning and teaching English in English classes.

The findings from the questionnaire illustrated that teachers perceived the flipped classroom as a benefit for promoting student-centered learning, which increases their learning autonomy and helps them actively grasp the process of learning. This is consistent with a literature review where the activeness of rewinding materials or cramming them as many times as they wish is considered an advantage (Millman, 2012; Bergman & Sam, 2012; Elaine, K., Mira P., Jonathan, S. & Howell, R., 2018).

As reported in the questionnaire, it is clear that students are satisfied with the use of the flipped classroom. The increased preferences index can be attributed to the student's engagement in information exchange and discussion while learning. The results are consistent with some previous authors showing that this benefit serves as a rich resource for building engagement (Davies, R. S., Dean, D. L., & Ball, N., 2013; Başal, Ahmet, 2015; Talan & Gulsecen, 2019; Nguyen, T.T, 2021).

More importantly, with the reference from table 1 given by Bergmann & Aeron, a potential result towards the increase of teacher-student interaction and student-student interaction is likely shown. Teachers agreed that students expressed more positive information exchange and participation (Bergmann & Sams, 2012).

However, the findings from the questionnaire also revealed some challenges for students and teachers while participating in the learning activities of the flipped classroom. For starters, the teacher cannot know whether students actively use the video or prepared materials at home (Millman, 2012; Bergmann & Sams, 2012). Furthermore, technical issues encountered while recording or creating videos were demonstrated (Millman, 2012; Bergmann & Sams, 2012). However, these barriers did not prevent teachers from trying and applying this approach in their teaching. Teachers admitted these difficulties encouraged them to figure out more approaches to have more efficient applications for students.

Conclusion

Based on the findings of observations, interviews, and questionnaires, it is possible to conclude that the FC has aided teachers in improving their teaching and providing more effective assistance to their students. Besides, according to the teachers' interviews, the activities conducted in this approach positively influenced students' perceptions towards participation and engagement. Teachers affirmed that their students actively joined and immersed themselves in different activities with the support of teachers as mentors and supporters in need. Thanks to the FC, teachers have been offered more private time to work one-on-one with struggling students more often, which has increased teacher-student interaction during the lesson period.

However, to carry on a successful FC, teachers had to get through some challenges, such as preparing a workload related to making their own videos or designing in-class activities. Some technical problems were also big concerns for teachers in terms of ensuring that students were easily accessible to networking or pre-activities at home without instant help from teachers.

To successfully reach the destination of blended learning in general and the FC in particular, a well-prepared stage is really significant. To have good control over how activities are conducted, teachers must have a solid foundational understanding of the approach and its construction. Thus, teachers should spend more time reading and experiencing it before officially applying it to their teaching. When teachers decide to use the FC in their teaching, it is pivotal to stick to it since its benefits are worth trying persistently.

As this research is conducted at a specific university, the small number of participants is a limitation, so the generalization is not as strong as in some other studies. Moreover, researchers based some observations solely on several lesson periods, which is another limitation.

Acknowledgment

I am grateful to my colleagues at the University of Finance and Marketing for their assistance and expertise with my research. In particular, thanks to T1, T2, and T3 for their assistance, I myself attended and observed classes and got in-depth information for my interview.

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Biodata

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Appendix 1 Questionnaire

Constr ucts	Ite ms	Statements	Answer					
			Yes		No			
1: How masterful are the teachers in the implementation of the FC?	1	Do you utilize a flipped classroom with any of your teaching?	Yes		No			
	2	Which students' level do you apply to flipped learning?	High competent		Neutral		Low competent	
	3	Which language area do you prefer to flip?	Spea king	Liste ning	Rea ding	Wri ting	Gra mma r	Voca bular y
			SD	D	N	A	SA	
2: What advantages do you have while using the flipped classroom?	4	The flipped classroom is beneficial to busy students						
	5	Low-competent students benefit from the flipped classroom						
	6	Students are able to rewind the lectures if they do not understand						
	7	The flipped classroom allows students to learn at their own pace						
	8	Students experienced more peer interaction and collaborations than traditional classroom						
	9	Students have chance to work in collaboration						
	10	Teacher can remove passive learning from class						
	11	More teacher-student interactions were created during the flipped classroom						
	12	Teachers are able to personalize their instructions and scaffolding to students						
	13	Students preferred the flipped classroom to traditional approaches						
3: What disadvantages do teachers encounter during the application of the flipped classroom?	14	Students learn better in the flipped classroom						
	15	Students meet difficulties to access the video or materials due to technology problems						
	16	Teachers can assure that the students are accessible to the video						
	17	Teachers have too much workload to record the own videos						
	18	Teachers need to work hard to edit the videos or prepare materials						

Appendix 2: Interview

Date:.....

Teacher Code:.....

1. What pre-class activities do you assign students to do?
2. Which language area do you prefer to flip? Why so?
3. Do your students learn better in the flipped classroom compared with the traditional classroom?
4. What kinds of pros do you have while flipping your classroom?
5. What kinds of cons do you encounter while flipping your classroom?

Evaluating Online Applications in Teaching and Learning English for Mechanical Engineering Students at Hanoi University of Industry during COVID-19 Period

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ABSTRACT

Keywords: online teaching and learning English, benefits, drawbacks, solutions, interactive applications, the application of software

Since the COVID-19 pandemic occurred, social fields in general or education, in particular, have been affected considerably. Education, however, cannot or will not be interrupted due to this outbreak of infection. Specifically, face-to-face classes have been shifted to online ones. To maintain the effectiveness of learning and teaching English to students in the faculty of Mechanical Engineering, teachers have applied some applications, including Padlet, Google Classroom, and Quizizz. Quantitative and qualitative analysis methods will answer the research questions. The tools used for data collection are questionnaires and interviews. The authors conducted questionnaires and interviews with lecturers and second-year students of the Faculty of Mechanical Engineering at Hanoi University of Industry. This article focuses on evaluating the application of software in the online English teaching and learning process at Hanoi University of Industry. Besides, this paper demonstrates the benefits and drawbacks of these interactive applications as well as suggests some effective solutions to help teachers facilitate students in learning English more successfully.

Introduction

Rationale of the study

All members of the community—students, teachers, parents, and the community at large are always learning new knowledge. We live in a digital age, so teachers may still connect with pupils despite the pandemic's onset (Singh et al., 2020). During the pandemic, it is undeniable that studying at home via computer screen has become a trend, so students at Hanoi University of Industry are no exception.. Therefore, educators have found a way to ease the process by applying online learning tools to teach, namely Padlet, Google Classroom, and Quizizz.

Significance of the study

Academic issues include learning challenges, a lack of teachers' attention, and an increase in workload that have made it harder for students to focus during online sessions. Researchers from different parts of the world have studied how COVID-19 has affected students' academic concerns (Maskari, Riyami & Kunjumammed, 2021). Since they didn't obtain adequate instruction from their teachers (Ali, 2020; Sullivan et al., 2018), many students haven't benefitted from online learning and have stopped being interested in taking classes there. Thus, applying interactive applications such as Padlet, Google classroom and Quizizz in teaching Mechanical Engineering during the COVID pandemic becomes imperative. Teachers and students have benefited from the incorporation of web-based games or mobile language learning since it has improved teaching and learning. These technology tools help students become more independent and motivated. It also enables them to evaluate themselves based on the comments they receive following an initial assessment. For learning and teaching English, "padlet.com", "classroom.google.com," and "quizizz.com" have emerged as the most popular and widely used of the many online platforms.

Research Aim

This study's primary goal is to evaluate how well three online platforms work for teaching and learning English for Mechanical Engineering at Hanoi University of Industry. This paper also takes the benefits and drawbacks of these interactive applications into consideration so that some effective measures can be taken to improve the quality of teaching and to learn English.

Scope of the study

Second-year students of the Faculty of Mechanical Engineering at Hanoi University of Industry, which is located in Campus A: Minh Khai ward, Bac Tu Liem district, Hanoi, serve as the study's subjects. This is a public university that belongs to the Ministry of Industry and Trade with a 123-year history of development, and there are over 50 thousand graduates and postgraduates annually. Hanoi University of Industry has different specialized training such as Electronics and Electrical Engineering, Information Technology, Tourism, etc. Mechanical Engineering is one of the most prestigious faculties in this institution. Students learn English from basic to advanced levels with internal books which their lecturers write. The English proficiency of students in this school is from A1 to B1, according to CEFR.

Literature review

English learning context at Hanoi University of Industry (HAUI)

The global education system faced severe obstacles as a result of the COVID-19 pandemic, and the Hanoi University of Industry is not an exception. Traditional brick-and-mortar schools had to become full-time virtual schools as a result of the epidemic in order to continue offering instruction to pupils (Van Lancker & Parolin, 2020). Therefore, from May 2020 to March 2022, all students of Hanoi University of Industry in general and those in the faculty of Mechanical Engineering in specific, had to adjust to the shift from face-to-face learning to distance learning, where synchronous video conferences, social media, and asynchronous

discussion forums replace in-person interactions as the main means of knowledge building and peer interaction.

Applications to facilitate online learning: Padlet, Google Classroom, Quizizz.

Padlet application

A web 2.0 tool called Padlet offers a platform for the creation of virtual walls. A virtual wall has the same purpose as a notice or whiteboard and allows users to "pin" numerous and various file kinds (word documents, photos, audio files, and videos). A wall's creator has control over its content, style, layout, and privacy. When creating a wall, the author can select the background of the wall from the several "wallpapers" offered, and when there are multiple postings on a wall, he or she can "organize" them in different layouts, such as stream, freeform, or grid. By altering the privacy setting, a wall's creator can also manage who has access to the walls. He or she can, for instance, make the walls private (by giving visitors the QR code, the URLs, and/or the passwords to the walls) or public (walls can be "discovered" through internal or Google searches). It is possible to customize the links and addresses to the walls. Additionally, the creator has the ability to "control" what users can do on the wall. For instance, users can be permitted to 1) only read what is posted, 2) write on the wall and edit their own posts (but not edit or approve other users' posts), or 3) moderate (can view, post, edit, and approve others' posts) (Padlet.com). Before allowing others to view them, the post's creator can additionally moderate it. Unless it is deleted or the wall is deleted, the content on a wall is permanent. Another function of Padlet is the simultaneous posting of comments and file uploads by any number of authors. Posting will be shown in real-time on a Padlet wall. Activities on Padlet require an internet connection, just like with any other web tool.

The usage of Padlet in the classroom has undoubtedly brought several benefits, including collaborative learning, flexible learning, and learner autonomy. First of all, Padlet encourages collaborative learning in class, particularly in writing and speaking. According to Mulyadi et al. (2021), writing assignments is considered easier for both teachers and students, as they can post their products directly to the wall, and other classmates are likely to leave comments or feedback. By this method, students could learn from each other without feeling reluctant to be exposed to the whole class. Also, Padlet is believed to assist teachers in the process of teaching speaking (Syahrizal & Rahayu, 2020). Specifically, teachers could observe learners' reactions from their leaving comments on their counterparts' speaking videos. As a result, they can learn both strengths and weaknesses from their friends, as well as engage in classroom activities. Another obvious advantage is its flexibility. Students can access Padlet at ease and finish their exercises at their own pace compared to limited time in the traditional classroom setting. Thus, it is believed to boost students' participation in the online platform (Ann & Zainor Izat, 2018). Finally, the application of Padlet has enabled students to be autonomous in their learning as they have to decide every aspect of their final products (When? Where? How?), they have no other way but to manage their own.

However, the risks of technical glitches, as well as psychological components, are unavoidable (Syahrizal & Rahayu, 2020). The first encounter is an Internet connection, which is the prerequisite for assessing Padlet (a web tool). Thereby, if a limited connection or link

error happens, students are unlikely to submit their exercises to the website. Another possible issue among learners is that they could feel insecure when showing their writing or speaking publicly (Ahmed, Almuniem, and Mbuh, 2016). The reasons behind are possibly because they fear reading meticulous comments left on their walls. Even worse, they fear being judged in real life by what people read from these assignments.

Google Classroom Application

Google Classroom provides a platform for blended learning in schools to make it easier to create assignments and give students their grades paperless (Donald Yates, 2017). It is a well-liked Web 2.0 tool that provides many useful features and applications. It has the potential for teaching and learning, just like many other Web 2.0 applications, because of its distinctive built-in features that provide pedagogical, social, and technological affordances (Wang, Q et al., 2012). A new product called Google Classroom was added to Google Apps for Education in 2014. It takes into account the accomplishment of particular goals like streamlining student-teacher communication and making it simple to distribute and grade homework. It gives the students a chance to turn in their work by their instructors' due dates for online grading. Similarly, teachers can fully understand each student's development and return to work with the required remarks so that students can amend their tasks. As a result of these capabilities, Google Classroom is beneficial to not only students but also teachers. It streamlines communication and workflow for students, to say the least. In order to establish learning skills, being paper-free is essential. As a result, students may maintain their data in a single program better organized and paperless [Shaharane, et al., 2016]. In 2016, Latif, who supported this previously given view, emphasized the value of Google Classroom. It is completely effective in facilitating the teaching and learning process. It is simple for students to use whenever a need arises.

Google Classroom's most distinctive advantage for teachers is the facilitation of the marking process virtually (Islam, 2019). Grading exams, as well as assignments, can now be handled by computers, instead of manually checking each answer as teachers used to do in the past. In this way can teacher release the amount of workload significantly. Also, this application stands out to be a good candidate for classroom management, regarding its capacity to be synchronous among Google Docs, Drive, and Calendar (Ni, 2020). Thanks to its cloud-based technology, documents are recorded and saved in Drive. Moreover, online classroom schedules can be marked in the Calendar application on the phone. Teachers are no longer afraid to miss to grade one exam or to check whether a specific student has met the deadline or not. For students, the most obvious prospect from this web tool is access to the electronic library in terms of slides and handouts from offline lectures (Islam, 2019). As teachers could share these materials via online classes in an organizational way, learners may not have to note down long lectures as before.

Despite offering teaching-assisted features by Google such as visual classrooms, auto-graded exams, etc., it was not until the Covid-19 pandemic that educators began to adopt Google Classroom in their teaching. On the other hand, this online platform seems to be suitable for advanced technology users only (Ni,2020) as it requires students to understand how Google Docs, Drive, and Calendar connect together and how they operate to utmost their learning

process. Also teachers' ICT competence plays an important role as well (Iftakhar, 2016). Especially, experienced teachers accustomed to traditional teaching methods find negative or neutral attitudes toward this online platform.

Quizizz Application

Quizizz, a web-based assessment tool, has been innovatively used in formative assessment to activate students' self-assessments (Intan Sinta Dewi Rahayu, 2018). According to Bury (2017), Quizizz is a gamified online tool that helps students check their knowledge and progress in learning. Each student's question order in Quizizz is random. To give pupils more practice, teachers can also assign homework by using Quizizz. Multiple-choice questions contain two or four possible answers. Quizizz is a free, user-friendly online formative assessment tool that helps teachers assess students' language as well as their curriculum knowledge. Rahayu (2018) claimed that the gamification tool has significantly improved students' learning and achievement.

Rahayu (2018) states that Quizizz is a great game-based tool that can assist learners in checking not only their knowledge but also their progress in learning English. It is a well-known e-learning platform, according to Thomas Mason Lim and Melor Md Yunus (2021), that provides endless quizzes that instructors and students can utilize in their regular classes. With an Internet connection, it is possible to copy and share any of the quizzes that are available on the website. Rahayu (2018) asserts that teachers might assign homework to pupils as extra practice in addition to tests by using Quizizz. Each student in the class receives a different set of questions in a different order. The type of question in Quizizz is multiple choice which has at least two possible answers and four possible answers. In accordance with their own preferences and the requirements of their students, teachers can also design their own quizzes. That is the reason why teachers would much rather use Quizizz for instruction and learning.

The most prominent benefit of Quizizz is getting students' full concentration during quizzes (Dewi, 2021). Therefore, it is likely that quiz-takers get fair results, with the justification being totally random questions and answer options. Plus, these options appear only in a short time; thus utilizers should focus vigorously to grasp the correct answers. Furthermore, Dewi (2021) also reported that Quizizz would improve self-confidence along with motivation in studying English among learners. To summarize, Chaiyo and Nokham (2017) have come to five main effects of Quizizz on the perception of learners:

- Assist students in the learning process
- Increase their engagement
- Increase their comfortability in the learning process
- Encourage them in the learning process
- Affect their concentration

However, this challenge arises from the fact that not all pupils have access to devices that can run this program. This application is challenging to implement in distance learning because of issues with the Internet network and the high cost of Internet access. (Kristiani & Usodo, (2022).

Research gap

The previous studies (mentioned in the literature review) only covered the application of web tools or the activities utilized in these web pages. Prior researchers seem to focus on the pros and cons of each application, rather than classroom management. Therefore, this paper will delve into both their application in class contexts and the classroom management of non-English major students, particularly at Hanoi University of Industry.

Research Questions

To fulfill the purpose of the study, the survey and the interview were seeking to answer the following research questions:

- What are the benefits and drawbacks of online applications in teaching and learning English for Mechanical Engineering?
- What are effective measurements of the negative effects of web-based apps?

Methods

This study aims to analyze the advantages and disadvantages of lecturers and students in the process of applying three popular software including Padlet, Google Classroom, and Quizizz, in teaching and learning Basic Mechanical English 3 and 4 online at Hanoi University of Industry. The research questions will be answered by using both quantitative and qualitative analysis methods. The tools used to collect data are interviews and survey forms. The authors conducted interviews with lecturers of English and distributed questionnaires to second-year students of the Department of Mechanical Engineering at Hanoi University of Industry.

Research setting

This research is conducted at Hanoi University of Industry, with target participants being non-English major sophomores and lecturers of English faculty. The data-collecting process lasts for a semester, with 382 students and five teachers involved.

Participant selection

A questionnaire and an interview were employed to answer the research question and meet the objective of the paper. In this study, 382 sophomore students from ten different classes who specialized in mechanical engineering at Hanoi University of Industry were chosen to answer the questionnaire. Since they have roughly the same level of English proficiency, out of 382 students, 5 of them were selected randomly to conduct the interview. Also, five teachers who taught Mechanical Engineering English were chosen to be interviewed.

Data collection instrument

A questionnaire and interview were organized to find out the answer to the research question.

Questionnaire

The questionnaire method is chosen because it enables the researchers to collect a large amount of data in a short period of time. This is particularly helpful since the researcher

decides to collect data from 382 participants.

In this study, the questionnaire was self-designed by the researchers to collect the necessary data. We use multiple-choices in questions 1 and 3, and a 5-point Likert Scale in question 2. All three are aligned with Literature Review to determine students' attitudes towards three online software (Quizizz, Google Classroom, Padlet), along with the influence of these applications when learning English in the classroom context. Plus, to enhance its reliability and validity, we consult opinions from colleagues being teachers in the faculty of language at Hanoi University of Industry.

Interview

Analyzing data from the questionnaire alone is not enough, as it is only numbered, and it might be hard to infer the meaning behind participants' choices. The interview method will rectify this drawback by collecting students' rationale and further explanation behind their choices. This interview was constructed based on the bedrock of the questionnaires.

For this interview, five interviewees were selected randomly to answer a set of questions. These questions are closely related to the questionnaire, aiming to find more details and explanations regarding the participants' scoring results.

Moreover, with the purpose of evaluating the pros and cons of the abovementioned three applications, 5 educators were asked to carry out this interview.

The interviews are transcribed and then interpreted to serve the purpose of this research.

Data collection procedure

The research process includes two phases in total.

Phase 1: The questionnaire was handed out face-to-face to three classes, 382 students in total. Before giving out the questionnaire, the researcher explained the purpose of the research, and then the participants were asked to fill out the questionnaire in 10 minutes. During this time, the researcher was on standby, ready to answer any questions from the students.

Phase 2: After analyzing the results from the questionnaire, 10 participants (5 students and 5 teachers) were selected randomly to conduct the interview. During the interview, the answers were recorded at the researcher's request and the interviewees' approval.

Data analysis method

When the procedure of collecting data is finished, they will be analyzed by both quantitative and qualitative methods through questionnaires along with interviews, respectively.

Quantitative method

The first method used is the quantitative method. This is done after data is obtained from the questionnaires. This process utilized Microsoft Excel for interpreting data since it allows users to insert figures and numbers. To be specific, Microsoft Excel was used to count the frequency of participants choosing each criterion in questions 1 and 3, then calculate their percentage as well. In question 2, a 5-point Likert Scale was also analyzed by frequency and percentage.

Qualitative method

With the purpose of gathering more detailed data, a semi-structured interview was conducted. The researchers interviewed three individuals in order to figure out the underlying reasons why they chose each criterion ticked in the questionnaires. Thus, the study would have a more thorough look into students' attitudes toward task-based activities.

The interview data interpretation was followed by Dudovskiy's framework (2018):

“Word and phrase repetitions – scanning primary data for words and phrases most commonly used by respondents, as well as words and phrases used with unusual emotions;

Primary and secondary data comparisons – comparing the findings of interview/focus group/observation/any other qualitative data collection method with the findings of literature review and discussing differences between them;

Search for missing information – discussions about which respondents did not mention aspects of the issue, although you expected them to be mentioned;

Metaphors and analogies – comparing primary research findings to phenomena from a different area and discussing similarities and differences.”

Results/Findings and discussion

During the year from 2020 to 2021, online learning at Hanoi University of Industry was carried out using Zoom software so that teachers and students could carry out online learning activities according to the timetable arranged in the classroom. In addition, the teachers have applied a number of web-based applications like Padlet, Google Classroom, and Quizizz to make the lessons interesting, and teachers can control the participation of students in activities.

The authors have designed exercises, quizzes, homework, and assignments on Quizizz, Google classroom, and Padlet for warm-up activities, practice, regular tests, and review activities in Basic English for Mechanical Engineering 3 and Basic English for Mechanical Engineering 4 classes. This solution was used for the first time in the 2019-2020 school year at a time when students had to take a break from school because of the Covid 19 epidemic. When they were new to online learning, both teachers and students were confused about getting used to teaching and learning online platforms. In other words, many difficulties in the teaching and learning process came up at that time. But thanks to the combined use of online teaching support tools, the teaching, and learning of teachers and students became more convenient. Students gradually got acquainted with Quizizz, Google classroom, and Padlet, and every lesson became more exciting and engaging. Teachers also easily track the progress of students' homework.

Table 1.

Students' attitudes when using Quizizz, Google classroom, and Padlet software in learning English for Mechanical Engineering 3 and English for Mechanical Engineering 4

Attitude	Number of students	Percentage (%)
Very excited	354	90,1
Like	21	7,4
Normal	7	2,5
Dislike	0	0
Not care	0	0
Total	382	100

The survey results show that most students like Quizizz, Google classroom, and Padlet used in *English for Mechanical Engineering 3 and English for Mechanical Engineering 4* lessons. Up to 97.5% of participants expressed their likes and dislikes, only 2.5% of students were abnormal when participating, and no students showed any dislike or interest. Thus, the regular use of Quizizz, Google classroom, and Padlet in *English for Mechanical Engineering 3 and English for Mechanical Engineering 4* classes have made a positive impact on students.

The authors conducted a survey to more comprehensively assess the impact of learning games on Quizizz, Google classroom, and regular Padlet in *learning English for Mechanical Engineering 3 and English for Mechanical Engineering 4* lessons. The results are shown in the table below:

Table 2.

Impact of regular use of Quizizz, Google classroom, and Padlet in learning English for Mechanical Engineering 3 and English for Mechanical Engineering 4 lessons

Impact	Totally agree		Agree		Disagree		Totally disagree	
	Number	Percentage (%)	Number	Percentage (%)	Number	Percentage (%)	Number	Percentage (%)
Enjoy studying	357	91,1	25	8,9	0	0	0	0
Understand the lesson better	337	84,1	37	13,1	8	2,8	0	0
More interest in the lesson	382	100	0	0	0	0	0	0
Remember the lesson more	347	87,7	28	9,9	7	2,4	0	0
More participation	352	89,4	20	7,1	10	3,5	0	0

From the above table, it can be seen that the regular application of Quizizz, Google

classroom, and Padlet software in *English for Mechanical Engineering 3* and *English for Mechanical Engineering 4* lessons have a positive impact on the students.

The students all expressed the agreement that they prefer to study the subjects. Meanwhile, 13.1% of students agree, and up to 84.1% of students completely agree with understanding the lesson better when learning through Quizizz, Google classroom, and Padlet software, only 2.8 % of comments selected disagree. When participating in learning on Quizizz, Google classroom, and Padlet, they can compete directly with their friends, so they are more motivated to try their best. This is the factor that makes students excited to participate in exercises on Quizizz, Google classroom, and Padlet software, which helps them improve their learning results after each lesson.

100% of students think that learning through Quizizz, Google classroom, and Padlet applications makes them excited to participate in learning, and up to 87.7% of students completely agree that they will remember the lesson longer after playing games related to the knowledge section. The applications of Quizizz, Google classroom, and Padlet software also contribute to helping students enhance cooperation through discussion, exchange, and mutual connection when students work on exercises together in an assigned group on the software.

Advantages and disadvantages of applying online software

Advantages when applying online software

Economic benefits

When using Quizizz, Google classroom, and Padlet software regularly while learning English for Mechanical Engineering 3 and English for Mechanical Engineering 4 lessons, we have the following economic benefits from the results of the interview with five English teachers at Hanoi University of Industry:

- ✓ Quizizz, Google classroom, and Padlet software are tools that are free to use; therefore, teachers can use effective teaching aids without investment costs.
- ✓ When using these types of software for the purpose of testing, controlling, and evaluating, will save teachers time and effort due to the automatic grading system. While students do activities, the teacher can observe and know which students are not paying attention to the lecture.
- ✓ Since these websites allow all accounts to do quizzes or tests online, it can save the cost of photocopying worksheets on paper.
- ✓ At different times, teachers can adjust to suit each student, teaching plan to use when teaching

Social benefits

For students, when participating in learning on these kinds of software, they can improve their sense of self-study and skills. In addition, it can help create learning excitement because these applications provide various types of questions and exercises in various forms and vivid visuals. Since then, students' interest and love for the subject will contribute to motivating them to improve and improve their learning results.

For teachers, these are easy-to-use tools that support teachers in marking assessments and

control students' participation in activities automatically so that teachers know their learning ability. From there, teachers can adjust the teaching plan to suit the level of students and support students in learning so that they can maximize their abilities. Through the use of these softwares, teachers improve their skills in applying information technology in teaching, improving their skills in designing valuable tests in the online form. Creating an attraction to attract students to participate enthusiastically, voluntarily, and excitedly in the classes. In addition, teachers can reduce the time for grading and correcting students' papers and promptly update common mistakes in the process of training students' skills, contributing to improving teaching quality. Teachers meet the requirements of innovation in teaching and learning, diverse forms of regular assessment, and an unlimited number of tests.

Disadvantages when applying software

During the survey, it can be seen that, despite the timely preparation and adaptation, the applications of these softwares still face some difficulties for teachers and students caused by subjective and objective factors.

Subjective factors

To the teachers

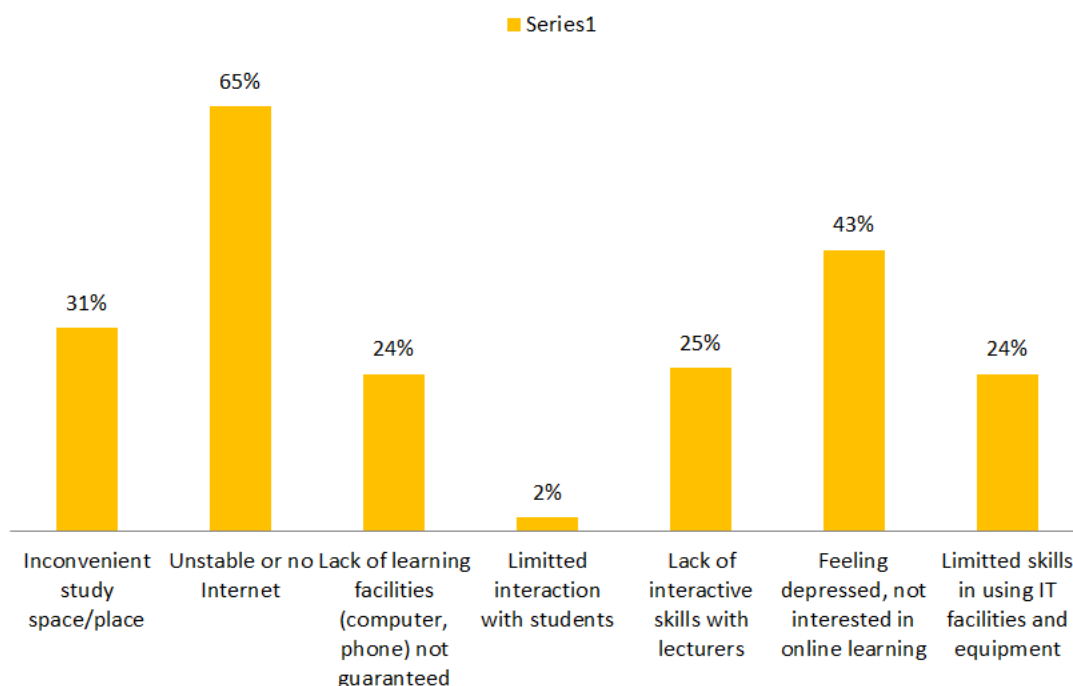
Most teachers involved in the interview said that they need to have a certain level of IT proficiency in order to create activities on such software.

The majority of teachers have to spend a lot of time designing activities to suit the content of the lesson.

To the students

To participate effectively in activities, students need a certain level of technological proficiency and appropriate learning methods to participate in classes and interact in cyberspace.

In traditional classrooms, the process of transmitting and receiving information is direct and fast. Students can directly respond and give opinions. This face-to-face interaction makes the learning process easier, richer, and more receptive. However, the complete transition to online learning has caused many difficulties for learners due to the lack of necessary learning skills, and the survey results clearly show this. Specifically, 25% of students said that they lack interaction skills with lecturers and limited skills in using information technology equipment and facilities, accounting for 24%. Notably, the percentage of students who are depressed and not interested in online learning accounts for 43%. It can be said that the mental state of students during the learning process also reflects the effectiveness of online learning. Online learning for a long time, students have to spend a lot of time in front of computer screens, lack of communication between lecturers and students, leading to psychological fatigue for most students. Therefore, the fact that students feel bored and uninterested is one of the biggest disadvantages of online learners. The lack of direct relationships prevents interaction in the learning process and can leave students feeling unmotivated to learn. This will greatly affect the quality of students' learning because psychology is considered a core factor and plays a very important role in determining learning efficiency.

Figure 1: Some difficulties students face when learning online

Objective factors

According to the survey results in Figure 1, devices and spaces to support learning are considered as one of the biggest difficulties for students in online learning. In particular, the unstable network connection and internet connection is the difficulty of most of the students participating in the survey (accounting for 65%). For students participating in online learning, a reliable internet connection is a prerequisite for their own learning. A weak internet connection can greatly affect the monitoring and acquisition of knowledge by students during the lessons. Besides, other difficulties in terms of learning conditions, such as unfavorable study space with a rate of 31%, as well as the absence or unsafe learning facilities, have significantly affected the online learning process of students (accounting for 24%). In addition, when studying at home, up to 29% of students said: "I am affected by ambient noise during online learning". One student said: "Currently, I personally feel that studying online is not very difficult, except that the environment around my house is sometimes a bit noisy because the place I live is a bit special. Selling and repairing electronics, so I regularly fix speakers, try music, radio broadcasts, etc. So there are times when I want to interact via text messages."

Thus, it can be seen that students are currently suffering from many subjective and objective factors affecting their online learning activities. However, in general, the main cause was pointed out to be the problem of internet connection, study skills, and some manifestations related to psychological factors in students' learning process.

Solutions to improve the effectiveness of online teaching and learning

From the analysis of the difficulties lecturers and students face in online teaching and learning, we propose some solutions to improve the quality of online teaching and learning.

To the students

First, students should read materials and prepare lessons before learning online to have deeper knowledge and easy entry. At Hanoi University of Industry, students who have a website that provides background knowledge before students join the faculty, students need to seriously spend time studying carefully and taking notes knowledge in notebooks so that the lesson with the teacher is really effective.

Secondly, online learning, self-discipline, and online learning culture will be the premise for you to study effectively. Students must have a high will to study, maintain a regular study schedule, and must not be negligent.

Third, students should also actively discuss ideas when studying online, avoid turning off the microphone, turning off the cam, and being silent during class time.

To the teachers

First, with online learning, the way the lecturer speaks or presents the lecture continuously for a long time can distract learners. Therefore, they need to save lessons to help learners have the opportunity to review the lectures more easily and effectively.

Secondly, it is advisable to innovate the method of interaction between teachers and learners through online learning. Lecturers can use software such as Padlet, Quizizz, Wordwall, Room Division on the zoom application, etc., to increase the interaction between lecturers - students, students - students.

Third, lecturers need to improve initiative, positivity, and self-discipline, which is highly appreciated in the current teaching and learning conditions in order to promote students' positivity. However, in online teaching, this requirement is really challenging. Therefore, teachers themselves need to have well-prepared lesson plans to attract and motivate students. In fact, preparing for an online lesson takes twice as long as an offline one. Teachers need to pay extra attention to understand the main content of the lesson. If teachers do not build their own initiative, positivity, and self-discipline, they can quickly fail in their online teaching plan.

Besides, the application of information technology in teaching has long become a requirement of every lecturer. Especially with online learning, the use of information technology is the key to success. The purpose of online teaching is the same as traditional teaching. Nothing else is to help learners create and consolidate knowledge about a certain topic. Therefore, schools should have refresher courses on information technology applications so that teachers can use them effectively in preparing lessons.

Conclusion

In this article, the authors have introduced the concept of technology's role in education, online learning, and other forms of online learning. At the same time, the authors analyze the difficulties that lecturers and students face when applying some support software in the process of teaching and learning online and propose some solutions. With the study analyzing the difficulties of lecturers and students when applying some supporting software in the process of online teaching and learning at Hanoi University of Industry, it hopes to help teachers and students improve the quality of online teaching and learning.

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Biodata



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Unplanned Transition to EFL Online Learning: An Analysis of Students' Perceptions in a Vietnamese University


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ABSTRACT

This research intends to investigate their perspectives on the abrupt transition to online learning at Electric Power University in Vietnam. The research questions were answered using a mixed-methods technique. After 9 weeks of online-only instruction, 87 university students were sent a 25-item questionnaire utilizing the Monkey survey program. A random follow-up interview was done with ten students who consented to participate in the interview in order to acquire insight into the specific concerns. The majority of students preferred face-to-face classrooms over online learning, and the majority had no intention of studying online in the future. During the time of 'forced' online learning, however, the majority of students thought their teachers were eager to offer them support and valuable feedback. The results have significant ramifications for instructors and teachers in relation to online learning and teaching in comparable contexts.

Keywords: online learning, students' perceptions, COVID-19

Introduction

The spread of the Covid-19 pandemic around the globe has significantly altered almost all facets of life, including education, and Vietnam has not been an exception. After the innovative Covid-19 began its worldwide attacks, institutions in Vietnam abruptly converted their face-to-face courses to mandatory online-only instruction. Moving traditional classrooms with physical attendance to the cloud might be difficult for both professors and students.

The educational setting when the Covid-19 pandemic broke out:

Shortly after the 2019 new coronavirus originated and mutated into a worldwide pandemic, the second academic session began at Electric Power University. Until the National Assembly approved the solid action to prevent the spread of COVID-19 through the practice of physical distance, lessons were conducted regularly through face-to-face sessions for the first several months. In the middle of March 2020, all universities in Vietnam, including EPU, will be required to cease all activities and shift their lessons online. The quick change to 'mandatory' online instruction has subsequently led instructors and students to experience a number of shocks, particularly given the lack of prior preparation.

Context of the study: Blended learning course in EPU

- *Benefits of blended learning course in EPU*

Before the outbreak of the Covid -19 pandemic, freshmen at EPU were accessed to the ELT blended learning course. The General English (GE) course takes place in the two semesters of the first year. This course is credit-bearing, and students need a passing grade in each one to graduate. In other words, English is a compulsory subject at EPU. Students come from various disciplines, including Electric Engineering, Energy Management, and Business Administration. Class sizes range between 40 to 50 students for each teacher, with each student receiving two to four face-to-face teaching hours a week on average. A course runs for about 15 weeks of a semester.

This is a blended learning course, so online learning has become an integral part of the learning process. Students are required to finish online progress tests and exercises every week with an automated grading system.

The General English (GE) course at EPU lends itself nicely to face-to-face delivery since lecturers may physically assist students via in-class Interaction. The GE course's face-to-face component is taught over two semesters and 105 periods (each period is 50 minutes). On average, students have between three and six class times every week. It is not difficult to see why face-to-face channel becomes the primary style of instruction for the GE course. First, it has been the conventional mode of instruction at EPU and a number of other institutions in Vietnam for many years. The course book (Life-Pre Intermediate) will give the curriculum in terms of content and sequence. Consequently, it is the way in which the fundamentals are originally introduced and performed. In addition, the lead mode may govern the speed of the course by ensuring that all students finish the main subject at the same time prior to the follow-up activities that they can do at their own leisure online or via self-study. Online or independent study assignments augment the curriculum and offer controlled practice and extension opportunities for students.

- *Challenges of Blended learning course in EPU*

However, the significance of online learning in this blended learning course could be clearer. The online components of the course are given using the learning management system Life Online Workbook (MyELT), an integral part of the Life series. MyELT is a web-based learning management system created by National Geographic Learning to support several textbooks. MyELT provides instructors and students with more flexibility and convenience with its teacher-led assigned activities and self-study choices, which are available anytime, anywhere.

MyELT provides English language learners with engaging exercises that reinforce and consolidate the language and abilities presented in each National Geographic Learning program. This LMS offers few opportunities for teacher-student Interaction. It is a popular learning management system because its automated grading system and online tool for supporting students' self-study in consolidating their information have decreased instructors' workload significantly.

Despite technological advancements in education, the online learning experience of university students has received little consideration. This research intends to examine the attitudes of EPU students about the quick shift to 'forced' online learning in light of significant changes or problems. This inquiry will thus give a deeper knowledge of the online learning experiences and perspectives of students. Surjono (2015) found that online learning that is tailored to students' learning preferences is more likely to be effective. It is intended that this research would aid educators in preparing for any future educational disruptions and in designing learning that is responsive to students' perceptions and expectations.

Literature Review

The Necessity of online learning due to the crisis of Covid 19

During the previous academic year, the effects of the worldwide pandemic impeded higher education in Vietnam. The Corona Virus has prompted universities to transition from face-to-face to online teaching. This catastrophe will force institutions previously resistant to change to embrace contemporary technologies. This calamity will reveal the profitable side of online education. We can handle a huge number of pupils in any area of the globe and at any time with the aid of online teaching methods. All institutions must combine a variety of online instructional techniques and strive for greater technological adaptability. Numerous institutions throughout the globe have completely digitized their operations in response to the severe need of the present circumstances. Online education is becoming the only viable answer to this problem. At this time, excellent promotion of online teaching and learning is vital. As a result of the Covid-19 pandemic, the number of Vietnamese institutions offering online courses has expanded significantly. There was an overnight transition from conventional classrooms to virtual classrooms, which means that educators have modified their whole educational approach in order to address new market conditions and adapt to changing circumstances. During this difficult period, the question is not whether online teaching–learning techniques can give excellent education; rather, the problem is how academic institutions will be able to embrace online learning on such a large scale (Carey, 2020).

Globally, resistance to change will be of little use to educational institutions. They will be evaluated based on how quickly they can adjust to the changes and their ability to maintain quality. The reputation of educational institutions is in jeopardy due to the scrutiny of the whole society. In light of this, their adaptability may be determined by how effectively they respond to this crisis and how well they retain the quality of their education. In reality, academic institutions could hardly change their whole college courses overnight into online resources. Numerous variables relating to the perspectives of students and instructors, their learning and teaching styles, IT literacy, and technological platform conditions... All of them pose significant obstacles to the efficacy of entirely online learning at this moment of sudden change with little prior preparation.

On the other hand, the pandemic also forced many academic teachers unwilling to use e-learning or without the appropriate competence to use e-learning in their teaching activities effectively. All teachers and students were suddenly forced to move to a learning system via electronic devices and the Internet. Forced e-learning, although necessary- it enables the educational process to be maintained. At the same time, it might create unanticipated and often undesirable changes in students' perceptions of their teacher and online learning.

Students' preparation for wholly online learning

Even before the Covid 19 pandemic, online education had become prevalent in many nations. There are two primary forms of online instruction: asynchronous and synchronous. As teachers save readings and lesson materials on the learning management system, asynchronous online education is not delivered in real-time (LMS). In contrast, synchronous online teaching is a live session given in real-time using online platforms such as video conferencing or live video platforms. However, there are still disputes in the literature about the possibility of substitution. In reality, a mix of asynchronous and synchronous modalities of education should be used to enhance the effectiveness of online learning (Moorhouse, 2020)

When faced with a rapid shift, however, many educational institutions are faced with the daunting challenge of introducing online learning to their faculty and students. According to Gyamfi (2018), students are likely to be influenced by online learning while it is new to them, prompting them to continue using it. Moreover, students' preparation correlates with their online learning performance. As proven by (Hung, 2016), it is vital to assess the preparedness of students for online learning in order to comprehend how to accomplish successful online learning.

Students' motivation and satisfaction with online learning

The concept of student satisfaction, it is described as "a student's subjective judgment of the different educational achievements and campus life experiences" (Elliott & Shin, 2002, p. 198). Contributing to an individual's happiness are satisfying needs, desires for success, and potential intellectual fulfillment. According to Callaghan et al. (2013), online learning satisfaction influences intrinsic motivation. Furthermore, the intrinsic drive has a tight association with academic accomplishments (Gottfried et al., 2009). Moreover, intrinsic motivation is one of the essential components for effective online learners. According to Hue and Jalil (2013), intrinsic motivation has a substantial relationship with positive attitudes and beliefs toward internet usage.

Multiple studies have measured the amount of student satisfaction with online learning. According to Dziuban, Wang, and Cook (2004), students were more likely to express a high degree of satisfaction if their teachers demonstrated efficient communication and course organization. Moreover, Shea et al. (2003) demonstrate that students who got appropriate feedback and teacher contact reported high levels of learning experience satisfaction. In addition, Ke and Kwak (2013) show that active learning, genuine learning, and learner autonomy contribute to student happiness.

The motivation to learn may relate to students' willingness and desire to engage in the learning process (Gray & Di Loreto, 2016). It is essential for teachers to encourage pupils to adopt a more active learning approach. Mandernach et al. (2011) illustrate that instructors should assess students' views of their "support and maintain learning" participation (p. 280). However, online learning is not assured when pupils are not motivated. Therefore, teachers should guarantee that pupils are actively engaged in learning by sparking their curiosity and fostering engagement.

Related studies

There have been a number of studies evaluating students' perceptions of online learning in a variety of global settings during the last several years. For instance, Smart and Cappel (2006) investigate the attitudes of undergraduate students towards the incorporation of online components in two business courses. Students' perceptions that the online modules lacked sufficient "new" knowledge was the most prevalent problem identified in their research about online learning (p. 211). A few years later, Shraim and Khlaif (2010) investigated the attitudes of secondary school pupils toward E-learning. Despite the fact that they may not yet be prepared to use e-learning, their findings demonstrated that the majority of students had good sentiments regarding its usefulness. However, according to their results, the majority of students were worried about their time since the e-learning approach distracted them.

In addition, Morris (2011) studies the perceptions of online learning among college students in the United States using a questionnaire, interviews, and artifact evaluations. The data indicated that students felt distant or alone in their online courses. However, the situation improved with the assistance of their professors, whose engagement and support they regarded to be the most beneficial in the course. In addition, Skordis-Worrall, Haghparast-Bidgoli, Batura, and Hughes

(2015) investigate the perspectives and experiences of students in their online courses. Their findings suggested that their participants had both favorable and unfavorable sentiments regarding online education. As with the research by Morris (2011), their results indicate that one of the most influential elements of learning is the instructor component, which involves offering assistance and timely feedback. Furthermore, the technique of lecture delivery was not as crucial as the lecture substance and quality.

Since the spread of Covid-19, there has been an increase in online learning research in Vietnam. In her work, Nguyen Thi Thuy Trang (2020) examines the effects of the covid-19 epidemic on higher education institutions and the adaptations made by these institutions in response to the issue. Due to coronavirus limitations, 71% of domestic students reported some desire to pursue their degree online, while just 29% responded that they had no interest in studying online. In addition, 57% of students said that they anticipate colleges to offer adequate online platforms and to transfer more of their courses online.

Connectivity to the Internet by the instructor and the pupils is a factor that influences learning (Hsiao, 2012; Pham & Tran, 2019). The study shows that access to online learning may be restricted to people whose Internet connections are insufficient to complete tasks. This challenge has gotten more apparent to the degree that learning must be dependent on technical tools and that educational institutions, teachers, and students fight to get these resources.

In another study investigating student experience and satisfaction (Thach Pham, Phuong Lai, Vinh Nguyen, and Hai Nguyen, 2021), online interactions with material, teachers, and peers were important determinants of student satisfaction. It was underlined that instructors play a significant role in enhancing learner-instructor Interaction by offering pedagogical instructions utilizing various interactional matrices, technology tools, and learning analytics.

According to the existing literature, numerous types of research have been suggested and done to assess the influence of covid 19 on online learning in different countries, including Vietnam. However, these researches focused mostly on the elements that influence online learning and the obstacles it faces. In addition, little attention has been made to the rapid shift from traditional classrooms to online learning, particularly the exploitation of the students' perspective in this setting. In order to fill the void, the purpose of this research was to investigate the prospective attitudes of university students in Vietnam (EPU) on the fast shift to 'forced' online learning due to the COVID-19 issue.

Research Questions:

The study aims to seek answers to the following questions:

- 1. What are the perceptions of Electric Power University students on online learning and teaching?*
- 2. What challenges are students in the university facing in “forced” online learning?*
- 3. To what extent are students willing to “forced” online learning?*

Research Method

Pedagogical Setting and Participants

This study was conducted at Electric Power University (EPU) with 87 EFL freshman students, determined based on convenience sampling. A sample of convenience basically refers to

“drawing samples that are both easily accessible and willing to participate in the study” (Teddlie & Yu, 2007, p.78).

The students were selected randomly for the research. They come from varieties of majors like Electric Power Systems, Energy Management Systems, Business Administration, Business Accounting, and Electronics Engineering. They were studying the English blended learning course as a compulsory subject. According to the Common European Framework of Reference (CEFR), the student's English level was A2 at the time of the study, and they had 4 hours of English classes per week during two semesters. All of them had to take the English online assignments as an integral part of the online phase in the blended learning course.

Since the outbreak of Covid 19 in January 2021, the EFL course has been shifted in to wholly online. All participants in the survey of the current study were asked to complete the questionnaire when they had nearly finished the academic year with one semester of wholly online learning.

Convenience sampling is applied in this study with the aim of collecting data from students randomly from different majors. The rationale for utilizing this kind of sampling lies in the fact that it is affordable, and I can access the participants quite easily. Moreover, in this mode of sampling, members of the target population are homogeneous

Data collection

A web-based survey (Monkey Survey) was designed to investigate students' perceptions toward “forced” online learning. Survey items were developed in relation to the constructs mentioned in the Literature review. The survey consisted of 5 main sections:

- Section 1: Students’ perceptions on the usefulness of Online Learning
- Section 2: Students’ perceptions towards instructors
- Section 3: Students’ perceptions on technological skills
- Section 4: Students' perceptions on willingness to online learning
- Section 5: Students’ perceptions towards the challenges in online learning.

Items were measured using a Likert 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The final version of the survey is a 25-question.

In addition, a semi-structured interview was conducted with 10 students as interviews can produce a wealth of information and cover any number of content areas, providing a relatively inexpensive and efficient way to collect a wide variety of data not requiring formal testing (Marczyk, DeMatteo, Festinger, 2005). The interviews consisted of 3 open-ended questions, which aimed to collect more data on students' views regarding wholly online learning. The participants for the interview were chosen randomly to ensure the validity of the qualitative data. The interview was a focused group interview that was carried out through zoom due to the social distance at the time of the study. Each participant was interviewed for about 5 minutes.

The results of the interview were thematically analyzed to have a deeper understanding of the reasons for students’ perceptions. All interview data were recorded and then transcribed and translated into English. The author then read all the transcripts and found out the main themes related to all responses. The thematic approach focuses on identifying, interpreting, and establishing relationships among patterns noted in narrative materials.

The thematic approach focuses on identifying, interpreting, and establishing relationships

among patterns noted in the interview, such as themes related to Internet instability or Interaction.

Reliability

Using the Cronbach coefficient alpha, reliability was evaluated twice, first during the pilot test and again after data collection for the current research. The instrument's Cronbach coefficient alpha value was 0.911. A well-constructed scale, according to Mueller (1986), should have a reliability coefficient of 0.80 or above. Since the Cronbach coefficient alpha for the scale used in this investigation was more than 0.80, it is regarded as trustworthy.

Regarding the semi-structured interview, all participants volunteered, resulting in zero non-respondents.

Data Collection Procedure

In order to compile the student questionnaire, the researcher generated a pool of items by examining the aforementioned relevant literature. Taking into account the characteristics of the participants and the setting of the research, 25 items were selected from this pool. A professional in education has reviewed the questionnaire questions and revised their phrasing to eliminate ambiguity. Pilot testing was conducted using a convenience sample of 12 students. Students did not raise any issues with the questionnaire's clarity and readability. As a consequence, the researcher made no modifications to the device.

Participants were given the questionnaires two weeks prior to the conclusion of the school year. The questionnaire was filled out by 87 students selected based on convenience.

Due to the covid-19 epidemic, the interview was performed online as well. The four interview questions were prepared using a Google form and distributed to ten students who volunteered to answer the questions.

Data Analysis

As the purpose of this study is to determine how EPU EFL learners viewed "forced" online learning when the Covid-19 pandemic broke out, the findings were analyzed descriptively, which involves describing a phenomenon in detail using a variety of data collection methods such as frequencies, percentages, Mean and SD, and data analysis.

In this research, SPSS 22.0 was used to analyze the quantitative data. The Interview-qualitative data was evaluated using content analysis, which requires carefully going through each transcript by assigning codes such as numbers or words to identify textual features (Dawson, 2005).

Findings and Discussion

Descriptive results

Table 1. Perceptions towards the perceived usefulness of online learning

	N	Minimum	Maximum	Mean	Std. Deviation
1. Online learning can save costs and expenses	87	1.00	5.00	2.9811	1.08292
2. Online learning supports the communication between instructors and students.	87	1.00	5.00	2.8868	1.06807
3. Online learning support learning autonomy.	87	1.00	5.00	3.1698	1.13909
4. Online learning enhances the quality of learning	87	1.00	5.00	2.3585	1.07586
5. Online learning encourages sufficient access to education.	87	1.00	5.00	2.7170	1.06297

As illustrated in Table 1, in general, participants have a rather negative perception of the usefulness of online learning. It is noticeable that most of them disagreed about the quality of online learning, with a Mean below 3. In addition, they are also doubtful about the chances that they can access education sufficiently in the virtual learning environment. Most participants do not highly appreciate online learning in supporting communication with instructors. Interestingly, item 3 ranks the highest mean value, which reveals that students tend to believe that this mode of learning partly enhances learning autonomy. Not many participants seem to take cost and expenses into consideration regarding the usefulness of online learning.

Table 2. Perceptions of students towards instructors in online learning

	N	Minimum	Maximum	Mean	Std. Deviation
6. Instructors could organize the lessons efficiently	87	1.00	5.00	3.2830	1.08091
7. Instructors' teaching and lesson delivery was clear and well-organized	87	1.00	5.00	3.0755	.95774
8. Instructors could raise students' interests in learning	87	1.00	5.00	3.1698	1.03284
9. Instructors were willing to provide assistance when needed	87	1.00	5.00	3.4906	1.01190
10. Instructors provided useful feedback and suggestions.	87	1.00	5.00	3.3019	1.06672

As can be seen clearly in Table 2, participants generally did not display a positive attitude toward their instructors in the process of online learning. Most of them had neutral opinions about the way and how effective online lessons were delivered. Notably, many of them do not think that their teacher can enhance their interest in online learning. However, the majority of participants confessed that their instructor was willing to support them in this new learning environment.

Table 3. Perceptions of students towards technical challenges (IT literacy)

	N	Minimum	Maximum	Mean	Std. Deviation
11. I am confident about my IT skill to study online	87	1.00	5.00	3.4528	1.04819
12. I think using electrical devices (smartphone, laptop..) is easy	87	1.00	5.00	3.4906	1.04922
13. I met no difficulties related to technology in online learning	87	1.00	5.00	3.2075	1.14956
14. I have sufficient experience in online learning	87	1.00	5.00	3.2453	1.10776
15. The Internet connection is not stable enough for online learning.	87	1.00	5.00	3.0189	1.11787

Regarding technical challenges, surprisingly, not many students find this problem really matters in the process of online learning. The descriptive results in table 3 convey the fact that they are quite confident about their ability to employ technical devices. They believed they could solve technology-related problems during their learning time. The biggest obstacle regarding technical difficulties is concerned with Internet instability.

Table 4. Perceptions towards a willingness to online learning.

	N	Minimum	Maximum	Mean	Std. Deviation
16. I prefer face-to-face classrooms to online learning	87	1.00	5.00	3.8302	1.15585
17. Instructors should adopt online learning in the future	87	1.00	5.00	2.7358	1.14608
18. I feel interested when learning online	87	1.00	5.00	2.8868	1.03144
19. I am willing to study online in the future.	87	1.00	5.00	2.8679	1.12725
20. Online learning is more comfortable than face-to-face classroom	87	1.00	5.00	3.1887	1.12757

When it comes to how students are willing to continue this mode of learning in the future, most of them admitted that they preferred the traditional face-to-face classrooms. Therefore, it is understandable that they do not show agreement with adopting this learning style in the future. In addition, participants show little engagement in online learning, although they may feel that online learning, in some ways, can bring them comfort when they can study at home while attending classes.

Table 5. Students' perceptions towards challenges they faced in online learning

	N	Minimum	Maximum	Mean	Std. Deviation
21. I faced some language difficulties in communication during online learning	87	1.00	5.00	3.3585	.85697
22. I found that I was easily distracted during online learning	87	1.00	5.00	3.4906	.97315
23. I think I did not have enough preparation for online learning	87	1.00	5.00	2.8679	.89952
24. I faced technical problems during online learning, such as an unstable Internet connection.	87	1.00	5.00	3.2642	1.07687
25. I found that online learning demotivated me.	87	1.00	5.00	3.0377	1.01834

According to the data from the survey, as demonstrated in table 5, the biggest challenge that most students faced in online learning lay in language communication with their instructors. It has revealed the fact that they felt that their language is not proficient enough to exchange ideas with teachers in online lessons. More importantly, the majority of students agreed that they were easily distracted by external factors while participating in online learning. In general, technical problems, in some ways, represented challenges for them when accessing virtual classes. It cannot be denied that a number of students lost their motivation when being exposed to forced online learning.

Semi-structured Interview

Q1: In your opinion, what is the biggest advantage of online learning?

Regarding the merits of online learning, the majority of students referred to convenience in terms of saving traveling time and energy. They felt much more comfortable when they could stay at home or any place while joining the course. Therefore, they had better time management to fully attend the class. A student said: *“Online learning really helps me enhance learning autonomy when I have to arrange the time myself without much control from the instructor”*.

Q2: In your opinion, what is the biggest shortcoming of online learning?

It is not surprising that there is a variety of disadvantages related to this mode of learning. The most common difficulty that they found in this learning process involved the constraints in communicating and interacting with peers and teachers. This is a coincidence with the above descriptive result. In addition, most of the interviewees expressed their doubt about the effectiveness of online lessons when their content was not fully delivered to learners, especially in speaking skills and pronunciation.

“The biggest disadvantage of online learning lies in the fact that this virtual environment makes me feel isolated and lonely. I find it hard to connect with my instructor or my friends. After all, online classes can never replace traditional ones” (student B)

Q3: What changes would you recommend to improve online learning quality in the future?

It is so interesting to better understand students' suggestions for bettering online courses in the future. The most common recommendation among participants in the interview is concerned with improving chances for communication and Interaction synchronously and asynchronously. They highly appreciated the initiatives of the teacher in designing the lessons that can create chances for collaboration in a virtual environment. Especially, scaffolding took a lot of attention from respondents in upgrading online learning quality and enhancing engagement. They strongly suggested that teachers should give them sufficient support outside class, particularly immediate feedback.

“If only the instructor could give us more support and scaffolding-like materials after each lesson. It can be a video made by her to review the lesson or some kinds of activities to make us involved even asynchronously” (student C)

Discussion

In general, students at EPU did not highly appreciate online learning in terms of quality, effectiveness, and the content delivery of the instructor. The majority of them have shown reservations about digital learning. The main technical problem they encountered was an unstable Internet connection. This finding is coincident with research carried out by

Muhammad Adnan and Kainat Anwar (2020). In their study, lack of access to Internet facilities, lack of proper Interaction and contact with students and instructors, and ineffective technology were among the major challenges faced by higher education students of Pakistan. The sudden shift from the traditional classroom and face-to-face learning to online learning has resulted in a completely different learning experience for students. Most students, especially those from remote and mountainous areas, do not have access to high-speed or reliable internet services and are, thus, struggling with online learning. Students and parents almost felt this difficulty from middle to lower-class economies. They did not have an adequate budget to provide an internet network. Everything did not stop there. Even though the Internet is in their hands, students still face difficulties accessing the internet network due to the geographical location, which is quite far from the signal coverage.

According to Burston (2014), in online learning, good pedagogy will be nonsense if there are problems with technology access. Therefore, it is understandable that most participants were unwilling to participate in an online course for future study.

In addition, the challenge that students in EPU face in online learning is a lack of Interaction between teachers and students and students among themselves. It represents a constraint in understanding the lesson and acquiring knowledge. The other difficulty that encounters the process of forced online learning is the absence of sufficient scaffolding from the teacher when students put their very first step in this learning mode.

Conclusion and pedagogical implications

The study aimed to investigate students' perception of forced online learning and give an explanation about this fact in a university in Vietnam concerning different aspects like instructors, students' willingness or challenges, as well as the usefulness of this learning environment.

The above results seem to align with existing literature about distance matters in delivering coursework (Billing et al., 2001; Olson & Olson, 2000; Wells & Dellinger, 2011). For students, who were already feeling isolated and frustrated, remote courses seemed to lack connectedness, leaving them with additional feelings of isolation and frustration.

In general, students in EPU did not show a positive attitude towards this learning mode. They did not believe that online learning could enhance learning quality. This is the consequence of some factors like the way instructors delivered the lessons and Internet instability. This finding coincides with the study by Tran The Phi and Nguyen Trinh To Anh (2022). They found that learners' attitudes toward learning had a major influence on their learning during online sessions, whereas technological impairment was also the main problem(p.13).

Another study by Hoang To Thu Dung and Tran Quang Hai also supports this result. They have come to the conclusion that although many students agreed that E-learning was necessary, many of them also agreed that it was ineffective. It may be because they need to become more familiar 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. (p.31).

In addition, challenges that they faced during the learning process included difficulties in communicating with peers and teachers due to language proficiency. Although the majority of

students admitted that their instructors partly provided them with support and feedback, it was strongly suggested that there should be more activities that enhance collaboration. It has been proved by the research that forced online learning as inevitable and necessary for the survival of educational institutions during the Covid-19 pandemic is not the preferable way of studying. It may cause some serious unintended consequences for both teachers and students if there are no improvements and adjustments in pedagogy.

Firstly, instructors must prepare thoroughly before each online lesson. They should bear in my that their role now is an online teacher. A virtual learning environment is definitely different from the traditional one that they had got used to for many years. Therefore, online lessons should be designed based on time, necessary content or core content, and students' needs. Both time and content should be reduced because students easily get zoom fatigue and get distracted by the surrounding factors.

Secondly, another important factor in enhancing online learning engagement is increasing teachers' presence. In work on teaching presence, Anderson, Rourke, Archer, and Garrison (2001) delineated three critical roles that a teacher performs in the process of creating an effective teaching presence. The first of these roles is the design and organization of the learning experience that takes place both before the establishment of the learning community and during its operation. Second, teaching involves devising and implementing activities to encourage discourse between and among students, between the teacher and the student, and between individual students and groups of students and content resources (Anderson, 2002). Third, the teaching role goes beyond that of moderating the learning experiences when the teacher adds subject matter expertise through a variety of forms of direct instruction.

Finally, scaffolding plays an evitable role in supporting students in online learning. In the research's context, too little scaffolding could result in students' inability to successfully complete or perform certain tasks and instructional activities, leading to anxiety, frustration, and, finally loss of motivation and attrition. With regard to the mode of lesson delivery, both synchronous and asynchronous were synthesized in every lesson. In providing students with scaffolding, the asynchronous mode is more flexible and, thus, was utilized after each online lesson.

Limitations of the study include sample size and the context of the research where English is taught as a non-major subject. While the current sample is limited in size and representativeness is unknown, surveying is more systematic now that students have had wholly online classes for two terms. The survey sample was relatively small, and no demographic variables were represented. The sample may not be representative of all students. The topic was timely and required some haste at a time when most institutions were forced to move to online learning and had to deal with a variety of other unforeseen issues. Given these constraints, the researchers decided recruiting directly from universities would not result in a higher yield. In addition, the pandemic has made face-to-face recruitment an impossibility. Therefore, the generalizability of the results is unknown.

The article has paved a new line of research, including examining both genders as differences, as the sample in the current research was not representative. Exploring the transition to online learning across the course would be valuable as many institutions are still utilizing a blended format for many courses. In addition, the investigation of students' attitudes and perceptions may be different from the initial stage. It requires a longitudinal study because perceptions among students are a malleable construct that is highly context-dependent. It may change over time when their instructors have made certain improvements to adjust to the virtual

environment. Moreover, after a period of working online, they will gain more experience in interacting and collaborating with their instructors and their peers.

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non-English major college students' attitudes towards learning English . *AsiaCA*

Learners Perceptions of Using Google Classroom (GC) in Learning English at a High School in Vietnam

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ABSTRACT

Keywords: Covid-19, online study, Google Classroom, perceptions, online learning quality

Google Classroom (GC) is a popular application used during the pandemic. To examine students' perceptions at a high school in Vietnam of using GC in learning English, the authors carried out a qualitative-and-quantitative study in the 1st semester of the school year 2021-2022. The online study was a must for students at almost all levels in Vietnam to ensure their course completion throughout the Covid-19 waves. A 19-item questionnaire was delivered to 179 participants, followed by structured interviews with eight questions for 12 randomly-selected students. The study results indicate that there is a general consensus in students' perceptions of exploiting GC as a tool to learn their target language. Most students felt satisfied with employing the application because it is easy to use and useful for their language learning despite the fact that they got little technical assistance from their parents. This paper is expected to enhance the beliefs of teachers and researchers in general and those of languages in particular in utilizing GC to improve their students' online learning quality.

Introduction

According to Adeva Jane Esparrago Kalidas et al. (2022), the outbreak of the COVID-19 pandemic has led to a new norm of online learning. Pham & Vo (2021) claim that all levels of education, from primary schools to universities in Vietnam, in this scenario, ran the e-learning program to keep the education moving in response to the Vietnamese Ministry of Education's motto "Learners stop going to school, but not stop learning". Thanks to this, students could access different online learning tools, including Zoom, Microsoft Teams, and GC. Among the three platforms, GC seems preferable to both our teachers and learners due to its versatility which allows students to find their homework, submit their assignments, view their grades, and communicate with their classmates and teachers. To sign in to GC, all students and teachers need to do is have a personal Gmail account to sign in to GC. Our students perceive apparently that GC does not have limitations in terms of time allowance, space, or cost like the other two. GC allows students to stay in the cyber class until their teacher ends the room.

Literature review

Perception

Different scholars have different definitions of perceptions. Some focus on its components, while others emphasize its importance. Here are some typical definitions on which the study is based.

As for Montague (1997), learners' perception is how they feel about something. Students' perception assists the instructor in seeing something or making a decision based on what they observe. According to Chen and Hoshower (2003), students' perception is essential for substantial learning achievement or a good learning approach.

Quick and Nelson (1997) state that three primary traits influence our perception of others, including perceiver-specific characteristics (familiarity with the object of perception, the perceiver's attitude, mood, self-concept, and thought process), target-specific characteristics, and situation-specific characteristics. This means the perception mechanism is affected by both internal and external factors.

Google Classroom (GC)

Overview of GC

GC, before the COVID-19 pandemic, has been popularly applied among schools. It is a free set of Google tools for educators that includes Gmail, Drive, and Docs and is designed to help teachers collect tasks without using paper, as well as create Drive folders for each task and students to keep everything organized. Pradana and Harimurti (2017) define it as a product from Google for education that is very special because it has a lot of functions, such as giving announcements or assignments, collecting assignments, and checking assignments. Despite differences in definitions of GC, there is a consensus that GC makes it easier for teachers and students to create, share, collect, access, and store their files and folders digitally.

Scholars also agree that GC brings a wide range of benefits. It is easy to use and accessible from any device and promotes collaborative learning. In addition, GC allows teachers to provide online support to their learners immediately, which means that feedback becomes more effective because new comments and remarks have a greater impact on learners' minds. Furthermore, it makes the assignment process faster and more effective as teachers can easily see who has submitted their assignment and who is still working on it as well as students' feedback.

Functions of GC

As part of the Google Apps for Education suite, which aims to make Classroom learning less paper-intensive, GC has the following functions:

- Combining Google Docs, Google Sheets, Google Slides, Gmail, and Google Calendar to create a unified platform for managing student-and-teacher communication.
- Creating private classes that students can join with a private code or that are automatically imported from a school domain.
- Enabling teachers to create, distribute, and grade assignments within the Google ecosystem. Each class creates a separate folder in each user's Google Drive where students can submit work to be graded by a teacher. Assignments and due dates are added to Google calendar, where each assignment can be assigned to a specific category or topic.

Teachers can track each student's progress by reviewing a document's revision history, and after grading, teachers can return work with comments and grades.

Teachers can create and invite students to join online classrooms and create and distribute assignments. Students and teachers can interact about assignments on the site, and teachers can effectively track their progress. In short, GC is a free online collaboration tool that assists students in becoming more effective learners in the Classroom.

Previous related studies

Research findings from prior studies, both internationally and domestically, have provided some useful comparisons for this study. According to Shaharane and Rodzi (2016), Muslimah (2018), and Peter Ong et al. (2020), students found GC beneficial to their learning process and were happy with its use as an online learning tool. Besides, as for Pratiwi (2019), thanks to GC as a learning medium, they could repeat lessons, access the materials at any time, and get their learning process facilitated. Similarly, in a study on evaluating GC's functionality as a Learning Management System (LMS) and a means of promoting collaborative learning through assignments, Espinosa et al. (2017) concluded that it was extremely efficient for increasing student engagement. Shibuya, T. F. (2018) conducted a study by utilizing Classroom as an LMS to support a blended learning strategy in a Pengantar Linguistik Umum class for a semester. This study showed that Classroom was a satisfying LMS for blended learning in PLU courses because of its features, user-friendliness, and appropriateness in higher education programs. In Viet Nam, Hung (2021) used a descriptive survey design with questionnaires to investigate learners' perceptions of Online learning during the Covid 19 Pandemic at English Center at Can Tho University and found that students there reluctantly accepted online learning due to the epidemic.

With respect to prior studies, anyway, it's safe to assume online learning in general, and GC, in particular, fits well into the learning process. Since no one has investigated the perceptions of students about the application of GC in the English learning process at Tan Lap High school, this study is therefore of the essence and expected to be of great help in determining the amount of student acceptance of GC as well as in providing decision-makers with a better understanding about learner's perceptions of adopting GC in their learning.

Research Questions

To thoroughly comprehend learners' perceptions towards the use of GC in learning, researchers decided to carry out a study on Learners' perception of using GC in learning English. The study was implemented with the informant students at Tan Lap High School, where the authors are working at. Specifically, the study aimed to address the following research questions:

1. How do learners evaluate GC in terms of ease of access and usefulness in English learning?
2. How do learners satisfy GC in supporting them to learn English?

Methods

Pedagogical Setting & Participants

The study was carried out with 179 participants (92 grade 11 and 87 grade 12 students) from Tan Lap High School - a school in Dan Phuong district, Hanoi, Vietnam, in semester 1 of the academic year 2021-2022. English is a compulsory subject according to the national curriculum of the Vietnam Ministry of Education and Training. They have mixed levels of English. Especially all of the participants had 1-2-year of experience studying with GC. They used GC

to get assignments and documents from their teachers, submit their homework/assignments, and receive feedback/comments and grades from their teachers.

Design of the study

The combination of qualitative and quantitative approaches helps understand the research problem better than either approach alone (Creswell & Plano Clark, 2011). In this study, an explanatory sequential mixed-methods approach with the qualitative phase used to explain and interpret the quantitative findings were exploited in this study to address the research questions. The study has two phases: (1) quantitative data collection and analysis through a survey questionnaire in late March 2022, (2) qualitative data collection and analysis through interviews around April 2022 to provide a richer explanation of the quantitative data collected and analyzed. In the quantitative phase, the online survey questionnaires focusing on students' perceptions of using GC for ESL were created to gather data from Tan Lap High School students. This tool allows researchers to gather students' feedback on the effectiveness of using GC for online English learning. For the qualitative phase, whose aim is to enable researchers to get more insight into students' feelings about using GC to learn English during the online period, students were randomly selected to join the interview.

Data collection and analysis

As mentioned above, questionnaires and interviews were employed to discover the findings. The questionnaires with five questions about the ease of access to GC, seven questions examining the usefulness of GC, four questions dealing with students' satisfaction, and three questions investigating parents' support designed for 179 participants is adapted from Shaharane et al. (2016). A Likert scale is used to grade the responses to each question from very favorable to highly negative. The 8-question structured interviews were carried out with 12 randomly-selected students about the current use of GC, the ease of using GC, the effectiveness of employing GC for English learning, learners' satisfaction, and learners' parents' support in language learning.

In the first phase, the researchers gave the questionnaires to students through online classes with a clear and detailed explanation about the objective of the surveys, the purpose of each statement, and how to complete them. The students received the questionnaire through Google Forms, answered them, and sent it back to the researcher within 30 minutes. The researcher then based on learners' responses to sort and analyze the data. The findings are examined using the information gathered from the questionnaires and then entered into statistical software.

In the second phase, twelve students were selected by systematic random sampling for interviews around April 2022. The interviews took place in an online classroom. Students answered eight questions related to the research questions, which helped them better understand their feelings and perceptions towards the use of GC in learning English, thereby contributing to support and confirming the results through questionnaires.

Findings and discussion

Overall, there is hardly a contradiction between the results of the survey questionnaires and interviews. Findings from survey questionnaires on students' perceptions of the use of GC in English learning can be classified as the following figures:

Table 1. Students' perceptions of the ease of access to GC

Indicator	Questions	(strongly) Agree (%)	Neutral (%)	(strongly) Disagree (%)
The ease of access	It is easy to sign in Google Classroom because it is integrated with my gmail.	82.3	13.3	4.4
	It is easy to access the materials of the English course.	65.9	28.9	5.2
	It is convenient to receive and submit my assignments.	63.7	28.1	8.2
	Google Classroom has a user-friendly interface.	74	23	3
	Google Classroom is easy to use.	74	21.5	4.5
Average		71.9	22.8	5.3

Table 2. Students' perceptions on the usefulness of GC

Indicator	Questions	(strongly) Agree (%)	Neutral (%)	(strongly) Disagree (%)
Perception of usefulness	Google Classroom makes the English learning be conducted easily.	46.7	45.2	8.1
	Google Classroom is suitable for learning interaction in English lessons between teachers and students.	51.1	40	8.9
	Google Classroom reminds me to complete my English assignments on time.	54.1	32.6	13.3
	Thanks to Google Classroom, the exercises that I do and submit through the system are received and given feedback by the teacher, helping me to understand and apply the knowledge I have learned in doing the exercises.	57.4	46.7	5.9
	The teacher's feedback through Google Classroom is beneficial.	74.8	19.2	6
	The Google Classroom's grading system assists me in keeping track of my progress in English and comprehending the current topic.	58.5	32.6	6.2

	Thanks to Google Classroom, the topic objective, assessment, and content were all uniform.	54.8	37.8	7.4
Average		56.3	36.3	7.4

Table 3. Students' perceptions of satisfaction

Indicator	Questions	(strongly) Agree (%)	Neutral (%)	(strongly) Disagree (%)
Students' satisfaction	Through Google Classroom, my own goal in English learning is met.	40	42.2	17.8
	I would urge that this platform for learning be used in other relevant subjects.	53.4	37.8	8.8
	In comparison to other platforms of active learning, Google Classroom is my first choice.	50.3	37.8	11.9
	Google Classroom appeals to me as a learning endeavor and incentive booster.	31.9	48.9	19.2
Average		43.9	41.7	14.4

Table 4. Students' perceptions on their parents' support

Indicator	Questions	(strongly) Agree (%)	Neutral (%)	(strongly) Disagree (%)
Parents' support	I receive a lot of support in using Google Classroom from my parents	27.4	38.5	34.1
	My parents help me solve technological problems	14.8	25.2	60
	My parents buy me high quality devices and good Internet connection.	63.7	31.8	4.5
Average		35.5	31.8	32.7

It can be seen from the above tables that, on average, most students found it easy to access GC (71.9% strongly agree or agree). Besides, more than half of the students found it useful to use GC for their learning. The average perception of students' satisfaction with agreeing was a little higher than the neutral perception (43.9% and 41.7%, respectively). The proportion of

participants getting parents' support in terms of equipment investment was almost five times as much as that of getting assistance in terms of technical problems (63.7% in comparison with 14.8%). Only a small proportion of the students had difficulty accessing to GC, denied its usefulness, and were dissatisfied with the use of GC (5.3%, 7.4%, and 14.4 %, respectively).

Similarly, when interviewed, most students claimed that they started using it in 2020 when the first Covid-19 pandemic happened, and it was easy to access. They can use GC almost anywhere and at any time just with a google account, a smartphone or a computer to register. The researchers also found out from the interview that students used GC to receive and retain lectures and materials from their teachers, submit homework, take part in regular tests and get teacher's feedback on their work. One student shared: *"GC helps me study better because it enables me to remember my deadlines apart from allowing me to review my lessons, get assignments and submit my homework"*. Interestingly, before using GC, all of the interviewed students answered that they had used Zoom and a majority of students admitted that it was more suitable, user-friendly, and effective for English learning because they were not kicked out of the room in the middle; instead, they were able to interact directly with their teachers, post their recorded presentation, practice listening through e-books or slides shown by their teachers, get homework immediately, do online test as required, complete and submit their products and get feedback from teachers, and got their English skills improved quite a lot. Students also shared that GC enabled them to become more productive and efficient in terms of time, thanks to real-time reminders provided by their teachers. Only two interviewed students complained that GC lacked some interactive functions like Zoom and one of them emphasized that teachers should combine using GC and other tools to make lessons more interesting. In addition, almost all students were satisfied with GC and wished to continue learning online with it in case of a prolonged epidemic because GC proved helpful to them. In terms of parents' support, the researchers found out that students hardly got assistance when they were unable to log into the Classroom, their microphone or camera did not work, and so on and so forth, but they got an investment in Internet-connected devices.

In short, the findings, despite not being in line with the study result by Hung (2021) in which students reluctantly accepted online learning, are consistent with those from previous studies by Shaharane and Rodzi (2016), Muslimah (2018), Peter Ong et al. (2020), and Pratiwi (2019). A majority of the students, despite getting little help with technical problems, found it easy and efficient to use GC in learning English thanks to its user-friendly interface with cyber class. Not only does GC help them interact with their teachers smoothly without interruption, approach materials in a blink of an eye, and retain materials, but it also enables them to join games, do online tests, submit their assignments and get their teachers' feedback easily. This made them have fun, love learning English, and comprehend the subject better. They were especially willing to continue learning online if the epidemic was prolonged.

Conclusion

In conclusion, the study mentioned four criteria of students' perceptions of GC, including accessibility, usefulness, students' satisfaction, and parents' support. Overall, findings from the questionnaire relatively match those from the interview, and they show that almost all students hold positive perceptions of employing GC for English learning. Therefore, GC should be widely applied in online teaching and learning at high schools. More importantly, to make full use of the digital tool, high schools and teachers need to provide students with training sessions on how to use the digital tool and solve malfunctions occurring in the process of learning

beforehand in case they lack parents' assistance in dealing with technical problems when learning online at home. Also, teachers can combine GC with other mediums of online learning to facilitate their students' learning in accordance with their potential, learning styles, and diverse learning needs through the use of the platform.

Though the worst time of the Covid-19 pandemic seems to be over worldwide, the study is still expected to be helpful to teachers, students as well as researchers wishing to exploit GC for different educational models such as blended learning or distance learning during disadvantaged circumstances such as natural disasters, extreme weather, an outbreak of some other disease, tough locations, or even war.

Further study should focus on the perceptions of teachers of English as well as other subjects and parents on using GC to have a more comprehensive view of the matter.

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Language-majored students' perception of Blended learning at a university in Vietnam

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ABSTRACT

Keywords: Blended learning, Perception, Language-majored students, A University in Vietnam

Blended Learning (BL) has gained its prevalence in EFL teaching and learning context in Vietnamese higher education. This study aims to investigate language-majored students' perceptions of implementing Blended Learning in English classrooms at a Vietnamese public university. One hundred fifty-three freshmen majoring in Chinese, Korean and Japanese languages and currently learning English as a compulsory subject participated in this multi-method study. Data were collected through questionnaires and semi-structured interviews with six randomly selected students, then transcribed and analyzed thematically. Findings indicate that participants mostly perceive that BL enhances digital literacy and motivation and supports in-class learning. However, some challenges faced by these respondents included technical difficulties and the lack of self-regulation skills. The findings are of great value in giving educators and students a profound understanding of BL in EFL classrooms. Based on the findings and discussion, the study gave some recommendations for EFL teachers and institutions to facilitate students' BL experience greatly.

Introduction

In the recent decade, the use of technology has brought tremendous development in the education standard in the higher education system. Technology is being increasingly applied in teaching and learning in higher education institutions so that they can transform themselves into fully electronic universities in the future through the Blended learning (BL) method. It is believed that the implementation of BL in teaching English as a Foreign Language (EFL) has facilitated students' learning effectively. Combining online and face-to-face can improve students' language input and promote learners' autonomy. Therefore, according to Reinders (2012), BL has been widely applied in English language education.

In teaching and learning language, the support of teachers or software is not the only factor to ensure the success of BL. Another important thing is the acceptance and approval among learners. In the study of Porter et al. (2014), he illustrates that one of the vital phases in

implementing BL is the attraction of potential students. In Vietnam, a small number of studies on BL (Vu et al., 2011; Nguyen et al., 2014) have been carried out. Moreover, there have not been many studies investigating the language-majored university students' perceptions of the implementation of BL. That is to say, further research on how students perceive BL in the Vietnamese setting is required.

Literature review

In Latin perception, the process in which information is organized, identified, and interpreted to represent the environment to be meaningful to people reflects the perception. Furthermore, according to Darmuh (2016), perception is defined as the process by which individuals interpret messages to give significance to their environment. A prime example of perception is when students give their evaluations to the lecturers. Based on students' perceptions, the lecturer can determine what is needed for their learning. Perception research can help lecturers become more effective teachers.

The notion of BL contains two words: blend means mixing and learning means studying. Chew (2009) states that this term is still debated among scholars, though it is widely used in an educational context. However, in recent years, the term BL has come to indicate a "course which combines a face-to-face (F2F) classroom component with an appropriate use of technology" (Dennis, 2013). According to Santosh (2013), BL is a type of formal education program where students receive at least some of their instructions and information online, with some degree of student autonomy over the timing, location, and/or pace of their learning.

Debra and John (2010) reveal that BL is an effective method for students and teachers because it provides them with different ways of approaching new teaching and learning that is not available in the traditional learning environment. Students can benefit from the best features of 2 learning modes: online and conventional face-to-face learning (Namysova et al., 2019).

Research shows a variety of advantages of BL in EFL contexts. First, by incorporating an online learning mode, BL can provide students with diverse sources of learning materials (Gruba & Hinkelman, 2012). Therefore, students can have many more learning opportunities than they would not otherwise have when accessing current online resources.

Second, BL allows students to interact with teachers and other students in class more frequently (Reinders, 2012). More time in class could be spent on facilitating student-student and teacher-student interactions because students can self-study online. Third, BL can help learners engage in active and reflective learning. Freely accessing available online content in BL helps students have more time for reflection and improve their understanding of learning materials because they can learn or read the materials again whenever they want. Moskal and Cavanagh (2013) pointed out that students prefer BL because it enables them to work at their own pace and at any place. Incorporating online learning units allows learners to choose what, when, and how to study, which is suitable to their learning conditions or styles and highly motivates them as well.

Success in BL requires students' responsibility and active participation in their learning process (Launer, 2010) in order to achieve their learning objectives. Students may face two main challenges when it comes to implementing BL. Firstly, learners lack self-regulation skills. They need to understand their individual learning needs so that they can select necessary learning

procedures, evaluate and reflect on their learning progress, to adapt it as needed, but few students can follow the self-regulated learning practices which are required in BL.

Secondly, According to Teik (2016), Information and Communications Technology (ICT) facilities are one of the aspects that affect students' learning experience in a blended learning environment. However, students struggle with the use of technology in BL. Research reveals that technical problems can act as an obstacle to students' online learning, such as issues with an internet connection, the requirement for additional applications, or assignment submission systems (Moskal and Cavanagh, 2013). While taking BL courses, some learners also report their struggle with technological skills and technical assistance (Irum et al., 2020).

In the Vietnamese context, where EFL students are used to the teacher-controlled learning environment, learner-related challenges can be even more severe. Students often rely on their teachers' instructions and guidance to learn, which may prevent them from deciding what and how to learn. Besides, although students' interaction and collaboration with teachers and peers are essential in BL, it's the characteristics of Asian cultures, such as face-saving concerns, power distance between teachers and students, etc., that cause the challenge (Hofstede, 2010). However, with such a culture-driven context, limited research on BL has been carried out (Vu et al., 2011; Nguyen et al., 2014); therefore, more in-depth studies on students' perceptions of BL in the Vietnamese context should be conducted.

Research Questions

The study seeks the answer to the following questions in order to fill the research gap described above:

1. What are the language-majored students' perceptions of the BL method in English Language Teaching (ELT) at the School of Languages and Tourism (SLT)?
2. What are the language-majored students' perceptions of the benefits and challenges of implementing the BL method in ELT at SLT?

Methods

Pedagogical Setting & Participants

The current study was conducted at the School of Languages and Tourism (SLT), Hanoi University of Industry (HaUI). A group of 153 first-year Chinese, Japanese, and Korean-majored students participated in the survey. In each class, there are about 23 students and they have followed an English 1 of 75 periods equivalent to A2 level according to the Common European Framework of Reference for Languages (CEFR). Moreover, all English courses at SLT have applied the BL model with 40 in-class lessons and 35 online lessons. Therefore, students can learn face-to-face with teachers and peers and access the internal e-university system for free at <http://eop.edu.vn> to actively acquire knowledge for each lesson. During the first year, learners must complete two English courses, English 1 and English 2. The researchers chose first-year students as participants in this study because most had little or no chance to follow the BL method in learning languages beforehand, especially in using the EOP system in BL. Therefore, we want to know their perceptions of these issues in order to assist or guide them if necessary.

Design of the Study

Aiming to answer the research questions, the researchers have chosen mixed methods of data collection for accuracy, namely questionnaire, and interview.

Questionnaire

This instrument was used as the main approach to evaluate the effectiveness of the research question. Cohen et al. (2018) state that a questionnaire is "a useful instrument for gathering factual information, data on attitudes and preferences, beliefs and predictions, opinions, behaviors, and experiences-both in past and present time". In particular, the questionnaire adapted from Talis et al. (2018) consists of 5 questions that investigate language-majored students' perception of BL. A three-point Likert scale was used for gauging opinions: 1 = agree, 2 = neutral, 3 = disagree.

Interview

An interview is a useful tool for gathering information due to its provision of extensive information. Tashakkori and Teddlie (2012) define a qualitative interview as "unstructured, exploratory, open-ended, and typically in-depth so that several topics can be explored effectively." In other words, the interviewees are at ease responding to the questions in the absence of judgment by the interviewers. Data for this article consisted of 15-minute semi-structured interviews which were adapted from Talis et al. (2018) with seven randomly selected students from seven classes. This process investigates how students perceive the BL method and the advantages and challenges of implementing BL.

Data collection

Survey questionnaire

The researchers conducted the survey on Google Forms. In addition, the data collection procedure was divided into four phases: questionnaire design, pilot, questionnaire delivery, and data encoding. In the first step, the researchers designed the questionnaires and set up plans for collecting data. After that, the questionnaire was given to about 5-7 relevant respondents to get feedback and the workability of the questionnaire. Correction and adjustments have been made afterward. Then, the questionnaire was uploaded on Google Forms and sent to all respondents. Finally, encoding the data was of great importance. All the documents were synthesized and analyzed to determine the relevant content to the topic.

Interview

Interview investigation consists of some main stages, including thematizing, designing, interviewing, transcribing, analyzing, verifying, and reporting. First and foremost, the researchers formulated the purpose of the study and described the topic prior to the interviews. Then, the researchers planned the study design with regard to obtaining the intended knowledge. After that, it was time to conduct the interviews based on an interview guide. The next step was transcribing the data from oral speech to written text. Next, the researchers needed to analyze the interview material and verify the findings' generalizability, reliability, and validity. Finally, all the data needed to transfer into a readable product.

Data analysis procedure

First and foremost, the researchers spent lots of time studying and analyzing all the data from the questionnaires and interviews. Evidence from the records was noted down carefully and put in different groups.

In the meantime, findings from the survey questionnaires and the interviews were compared (and contrasted) to investigate students' perceptions of BL and the benefits and limitations of this method.

Findings and discussion

Students' perception

Regarding the students' understanding of BL, the interviewed students agreed that BL refers to the combination of online and face-to-face learning and teaching. When being taught in BL mode, students are given instructions and information online then they are able to learn at their own paces. The evidence can be seen in students' answers to the following question.

Student A said:

In my opinion, BL means the mixture of both online and face-to-face learning. I can learn vocabulary, grammar, listening, and reading in advance, and then when I come to the class, the teacher will lecture more. (...) This helps me understand the lesson better.

Besides, the study also reveals that most participants expressed a positive perception of implementing BL in teaching and learning English. The result suggested that more than 80% of the students agree that BL makes their study more convenient as it enables them to learn as well as complete assignments anywhere, at any time.

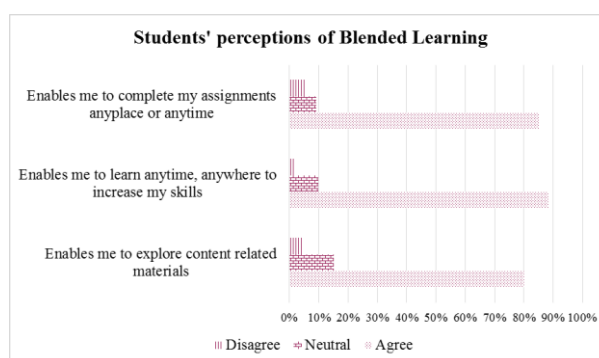


Figure 1 Students' perception of Blended learning

This aligns with studies conducted by (Tran Duc & Williamson, 2009). The students' positive perception of such a teaching method is based on the advantages of BL over the traditional teaching method in enhancing their linguistic competencies. Students also stated that tasks in BL were well-illustrated and presented in an easy way to follow, thereby enhancing their learning. It is important that the course's intended learning objectives correspond with the online activities to ensure a connection between the two components.

Benefits of Blended Learning in English Language Teaching for the students

With regard to the benefits of BL for language-majored students at SLT, data collected revealed that BL is helpful to students, especially in boosting their motivation and digital skills and fostering their participation in face-to-face lessons.

Motivation

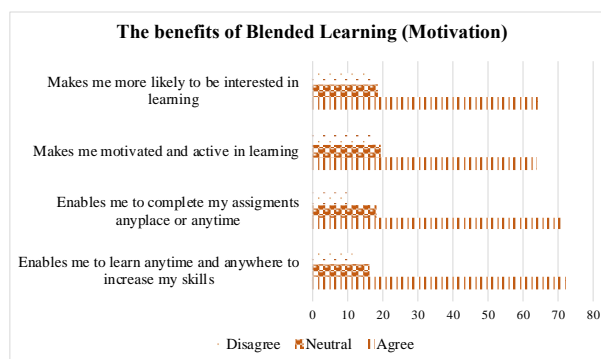


Figure 2 The benefits of Blended Learning (Motivation)

The chart demonstrates the benefits of BL in terms of enhancing students' motivation. More than 70% of language-majored students agreed that with the implementation of BL, they could learn and complete assignments regardless of time and location. Around 64% of respondents believed that BL increased their motivation, interest, and activeness in learning. This finding can also be seen in the interview when students expressed their satisfaction with enhanced motivation. For example, "I felt the vocabulary items on EOP were presented in detail and categorized by sub-topics, so I was motivated to learn and revise", said student A. This can be explained by the fact that materials and exercises on EOP are accessed irrespective of time and location. In addition, the materials also come in different formats, such as video or audio, and there are different types of exercises, thereby catering to students' diverse learning preferences and boosting their motivation.

Digital literacy

When being further interviewed, participating students shared that the implementation of BL allowed them to learn basic computer skills and use several applications. It can be seen from the chart that nearly 63% of students agreed that their technical skills were enhanced due to BL. As for student B, "I found myself better at technological skills than I was at high school because I knew how to use all the features on EOP to learn, do homework as well as give feedback for the course. Homework submission is often in the forms of YouTube or Google drive links, so BL also involves learning to use such applications.", she said.

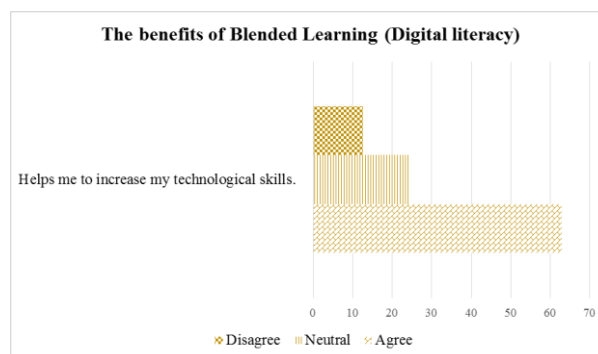


Figure 3 The benefits of Blended Learning (Digital literacy)

This is logical because online learning mode requires students to learn necessary computer skills so that they can use their online account to access materials, track their progress, take tests, and provide feedback to teachers and the online system.

In-class learning

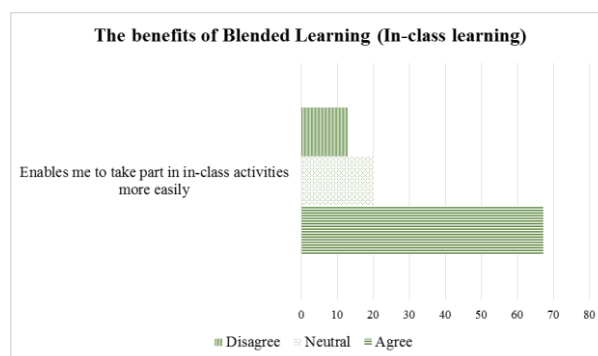


Figure 4 The benefits of Blended Learning (In-class learning)

This chart shows that for 67.1% of respondents, BL made their engagement in in-class activities easier. In further interviews, students emphasized the benefits of learning language knowledge and practicing receptive skills online prior to face-to-face lessons. Student F enjoyed this combination of online and offline modes because it was easier to apply vocabulary, grammar, and input from reading as well as listening tasks into speaking activities in class. To him, BL was more effective and time-saving than the traditional way of teaching. This is because face-to-face lessons consist of interactive speaking activities, and the input can be provided through materials and exercises on EOP.

Such advantages of BL are confirmed in previous studies by other researchers. According to Mu'ayyadah and Sahiruddin (2020), BL appeals to students because of the flexibility and freedom to learn at any place and anytime. The study conducted by Irum et al. (2020) also revealed that students become more self-dependent thanks to the completion of academic tasks through blended mode. Findings are also aligned with Talis et al. (2018) regarding students' interest and activeness.

Challenges of Blended Learning

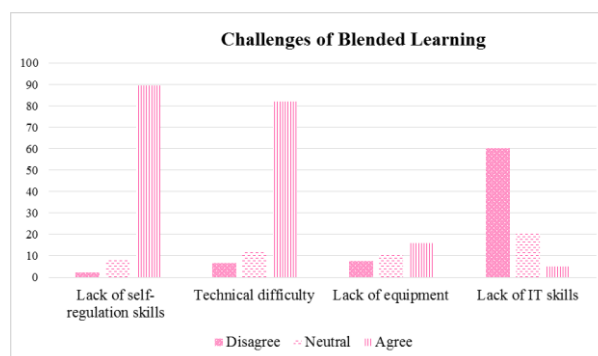


Figure 5 Challenges of Blended Learning

From the findings, it is clearly shown that the challenges faced by students while learning with BL are the 'lack of self-regulation skills' for 89.4% of student informants, followed by 82% of the respondents who chose technical difficulty. When being further interviewed, students A and C reported that they find it hard to proactively online self-study tasks as they are still accustomed to deadlines set by their teachers. The findings align with Yen and Huyen's study (2019). Although BL requires students' responsibility and active participation in their learning process (Alebaikan, 2010), students have long been asked to follow teachers' instructions (Tran Duc & Williamson, 2009). Such reliance on teachers for learning motivation and direction may hinder students from deciding the content and learning method as well as reaping benefits from BL.

Moreover, the problems with EOP system feedback also cause students frustration. In fact, the EOP system does not offer a 'sending private message' feature, and thereby students could not interact with their teachers directly through the EOP system. If they want to ask for teachers' instant feedback, they have to use another software such as Zalo, Facebook, or Gmail. Equipment and technical skills seem not to be a problem, with only 15.7% and 18.7 % of students, respectively, finding it difficult to learn through BL with the 'lack of equipment' and 'lack of IT skills'. These findings are aligned with the study of Reinders (2012), who found that students experience a sense of being lost and struggling with technology while taking BL courses. Therefore, they may not have recognized the benefits and teachers' intentions behind the materials presented. To counter such challenges of BL, orientation sections and help desks should be provided before and during the course. Besides, the EOP system should also be maintained and improved on a regular basis to make sure technical problems should be minimized. Moreover, there is a need to incorporate features that allow teachers to give instant feedback to students.

Conclusion

It can be concluded from the findings and discussion that students positively perceive the implementation of BL at a university in Vietnam. Most students felt they were motivated by BL as materials are available and presented in various forms. The use of BL also provides opportunities for students to practice topical vocabulary and grammar structures in advance,

which fosters in-class engagement.

The findings suggest that similar challenges of BL as those in other studies were perceived by students at a university in Vietnam. However, the percentages of agreements to items belonging to challenges were relatively higher, over 80%, while the figures for these problems in other research ranged from 50 to 60%.

These findings lay a foundation for several implications so that lecturers can boost students' experience. It is suggested that communicational tools should be incorporated into EOP, thereby providing a platform for students to interact with their teachers and receive instant support. In addition, addressing technical problems can also make BL experiences more rewarding.

With regard to limitations and recommendations, this study mainly relied on self-reported data to investigate students' perceptions of BL. Therefore, further research can be conducted using classroom observations and teacher-student online discussions. Besides, as suggested in the findings, teachers' guidance and facilitation also affected students' learning experiences. Because of this, more studies can examine the benefits of BL for the groups of students who receive more guidance and support than this current one. Finally, there is also the need for research into the implementation of BL in other Vietnamese EFL contexts, such as secondary or high school to analyze how students with different competencies, levels of autonomy, and technical skills perceived BL.

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Study on students' satisfaction with using Chatbot on Facebook's messenger platform to learn Chinese vocabulary

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ABSTRACT

In the context of the ever-evolving scientific and technological revolution and the strong globalization trend, proficiency in foreign languages becomes extremely important because this is the bridge between countries in all areas of life. Currently, using some technological applications in learning foreign languages is becoming a new trend in the digital edge. A chat box product (Chatbot) integrated into Facebook's Messenger platform helps students majoring in Chinese language review vocabulary in Boya Chinese textbooks at elementary and intermediate levels, including three main functions: learning vocabulary, checking an online dictionary and reviewing vocabulary. This research is conducted in order to assess students' satisfaction with the functions of Chatbot with the participation of 101 students majoring in the Chinese language at Hanoi University of Industry. The result indicates that Chatbot stimulates students' interest with user-friendly configuration to improve students' academic performance. The higher Chinese proficiency learners have, the more stringent requirements they have for study methods and the capacity to provide vocabulary from Chatbot. This application's preface significantly impacts learners' emotions during their learning progress.

Keywords:

Chatbot, Facebook, vocabulary, Chinese vocabulary

Introduction

In the globalization era, languages can be considered a bridge to connect people all around the world. Therefore, the demand for learning Chinese is increasing and has almost become a "trend". Chinese is becoming increasingly popular because it could help young learners have more opportunities to study overseas and have a better salary in future jobs. Especially, many large Chinese corporations have set up factories in Vietnam, and the cooperation relationship between Vietnamese and Chinese businesses is growing, opening up many job opportunities for people who are fluent in Chinese.

The industrial revolution 4.0 has strongly and profoundly impacted all aspects of life. Currently, the role of technology cannot be denied because it makes life more convenient, assessable, and modern. Many applications and utilities are integrated into smart devices to help people learn a new language easily. Therefore, the trend of applying technology to create intelligence and suitable products for life in general and for foreign language learners is extremely popular.

The Chinese learners in the current period at colleges and universities in general and at Hanoi University of Industry, in particular, are mainly Gen Z. This is the generation of young people who, since birth, have been exposed to modern technology and the strong development of the internet, social networks and mobile devices. Therefore, when Gen Z has the opportunity to study in an information technology environment, they will have the opportunity to promote their logical thinking and sharp mind and achieve more effective learning results than expected.

Previously, the authors successfully researched and developed an integrated chat dialog (Chatbot) on Facebook's Messenger platform to help Chinese learners at Hanoi University of Industry revise vocabulary according to the curriculum program at beginner and intermediate levels named *Boya Chinese textbook*. The Chatbot includes three main functions: vocabulary learning, dictionary look-up, and vocabulary revision. The Chatbot is called "Chinese Learning Technology" (CLT). Chatbot CLT has provided users with 2,518 Chinese vocabularies at beginner and intermediate levels, 20,850 Chinese characters with favorable strokes, 2,518 vocabulary test sentences, 440,752 audio files pronouncing words, and examples in the dictionary. Currently, Chatbot CLT could be a powerful tool for students to self-study Chinese at all times. In other words, students can interact with Chatbot by visiting the following address: <https://www.facebook.com/Chinese.learning.technology>. With a user-friendly interface, Chinese learners could get more knowledge from an extracted piece of information that is automatically replied to through a messenger box. When finishing their study, they could directly see the academic results and a summary of the total assessment. This practice can provide users with an overview of their learning progress step-by-step.

This study was conducted to evaluate the satisfaction level of Chinese language students at Hanoi University of Industry about the functions of Chatbot, and the participants included 101 students. The survey results encouraged authors to improve the chat dialog (Chatbot) to be a better version that helped Chinese language students have experience of learning technology platform at Hanoi University of Industry.

Literature review

Definition of Chatbot

According to Do (2020), an automatic answering system, also known as a Chatbot, is a computer program capable of communicating with humans by automatically answering questions or handling situations. The algorithms of their creators determine the intelligence of Chatbots. Chatbots often communicate with users through messages (Textual) or audio. Chatbots are applied in many fields, such as e-commerce, customer service, finance and banking, entertainment, healthcare, education, etc.

Benefits of Chatbot

Chatbots are mostly developed on the messaging platforms of popular social networks. The popularity of applications such as WhatsApp, Facebook, Messenger, etc, could be easily recognized according to the statistics of the user number of messaging applications worldwide by the website (statista.com) in 2018. In Vietnam, According to Thuy, N. T., Thuy, H. Q., Hieu, P. X., & Thanh, N. T. (2018), Facebook's Messenger has always taken the number 1 position, followed by Zalo. This is also the reason why the research team chose to develop a Chatbot on Facebook's Messenger platform.

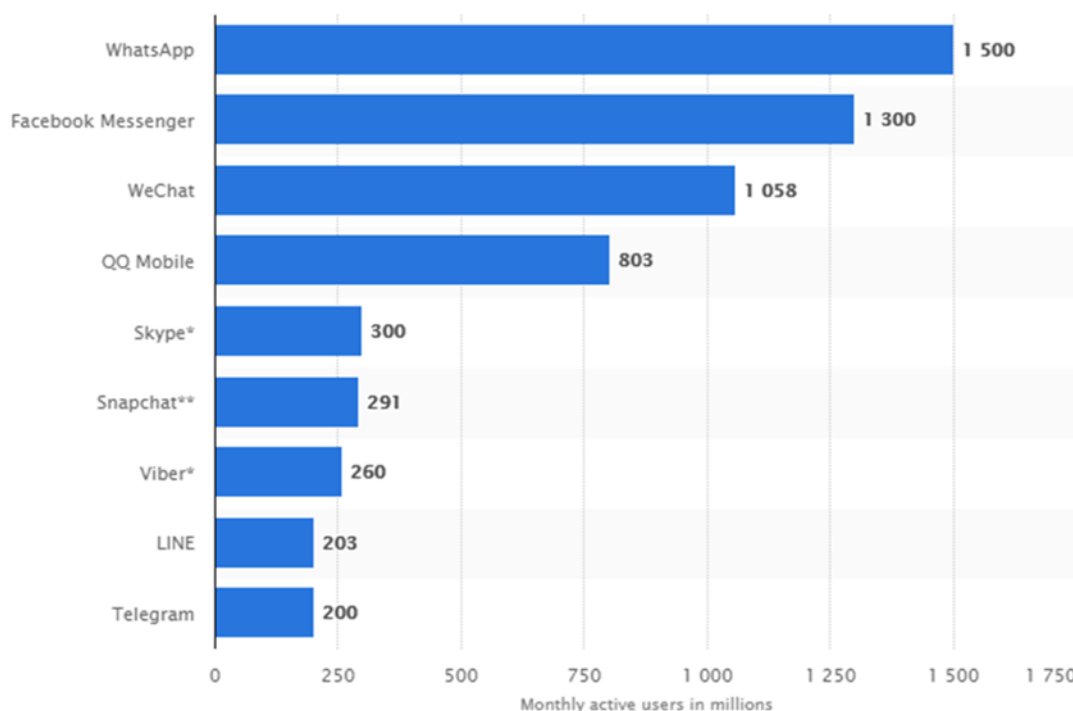


Figure 1: Global social networks ranked by the number of users in 2020 (Clement, 2020).

Chatbots have brought many benefits to people in modern life. Also, from the above data, it can be seen that people today often communicate with each other through smart devices. Chatbots that want to communicate with humans must appear on messaging apps. Chatbot activities are always online 24/24 and quickly respond to all human requests because they are robots capable of operating continuously 24h per day, 365 days per year, without break demand.

The Chatbot can handle different requests simultaneously without confusion. Unlike humans, who can only communicate with one person at a time, Chatbots can converse with thousands of people simultaneously, and each will get an immediate answer (Nguyen, 2019).

Chatbot contributes to improving the level of user satisfaction. Humans have emotions and constantly change. On the contrary, Chatbots are bound by some rules and obey everything they are programmed to do. Chatbots will always treat the customer perfectly no matter how rude the person is or the harsh language they use (Do, 2020).

Chatbot helps to improve work efficiency, reduce costs and save time. It can also help you like a secretary or an assistant at work. Some of the tasks that chatbots can help you accomplish are: searching for information on the internet, setting up appointments and reminders, and automatically aggregating and reporting on purchasing preferences, customer age, revenue, and profit daily or weekly. People will have more time for themselves when using chatbots to do time-consuming and boring tasks.

Although chatbots have many benefits and are widely applied in many aspects of life, they are not widely utilized in education and training. Very few educational institutions are developing Chatbot as a teaching and reviewing tool, but mainly focusing on developing their own Web and App. Some foreign language and soft skills teaching centers have used it, but only for customer care purposes.

The problems of applying information technology to create a Chatbot to learn Chinese vocabulary at elementary and intermediate levels

According to Bellman (1978), there are a lot of problems applied to Chatbot, but the research team selected problems in the field of education to solve learners' difficulties in learning Chinese and especially in word practice. The problem that researchers focused on was the functions to support Chinese learners on Facebook's Messenger platform with the main functions including: (1) Providing Chinese vocabulary level information; (2) Vocabulary queries for users on each level; (3) Providing vocabulary content for each level; (4) Providing answers to the vocabulary review question system in the form of a test.

Therefore, the current research aims to evaluate the effectiveness of using Chatbot (CLT) to help students study Chinese at an elementary and intermediate level with many systematic programming functions. Thus, students could contribute to reflecting and improving this tool to self-study better in the future.

Programming a Chatbot system to learn Chinese vocabulary at elementary and intermediate levels

Facebook's Messenger API Platform

API (Application Programming Interface) is an application programming interface; it is a method to connect with other libraries and applications. Windows, Google, Twitter... all have their own API. This API allows users to create applications with existing features or data on their servers.

Facebook's Messenger API Platform is a new technology introduced by Facebook at the H8 event in April 2016. This platform gives developers a tool to transmit messages directly to users on the platform of Facebook's main page. Thereby, Facebook wants to promote E-commerce development on its own page and contribute to the development of the current Chatbot.

Facebook's Messenger API Platform will communicate with the Chatbot developer's server with the Messenger application by sending messages to Webhook and using RESTful API. Webhook acts as an intermediary to transmit information between the user and the server. Then, the page's changes will be notified directly to the server through Webhook.

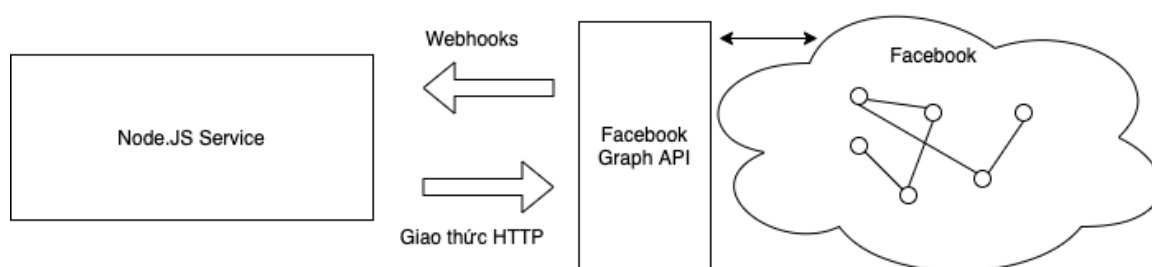


Figure 2. Operation Structure of Facebook's Messenger API Platform

The Messenger platform implements communication through a RESTful API, particularly Facebook's Graph API. Send/Receive API is one of the crucial parts, providing methods for transmitting and receiving information from the user to the server as well as from the server to the user. Therefore, to develop the Chatbot system, the research team has focused on building a server, processing natural language without necessarily developing an application on the phone or an application on the website to communicate with users. The send/receive API is used to reduce development time and costs.

The research team chose to program the system on the Facebook Messenger platform because, in recent years, the phrase "Facebook" has become extremely familiar to everyone because of its unparalleled popularity. Nowadays, it has become an indispensable part of everyone's daily life. Chatbot integrated into Facebook's Messenger is a tool that can communicate and interact with people through pre-programmed artificial intelligence, which can automatically message users. Previously, Chatbot was mainly used as a tool to help customer service be done 24/7 as well as sales and customer care activities be done automatically.

The research team has found out the applicability of Chatbot, took its advantage, and turned it into an ideal foreign language learning environment, as well as tried to fully exploit it. After that, the authors launched the tool "Chinese Vocabulary" to bring more new benefits for Chinese learners, especially those who studied Chinese according to Boya textbooks, to have access to an advanced, convenient, and completely free learning model. This new learning method meets the needs of learners at any time and anywhere while bringing great benefits and great development advantages such as reduced costs and learning time. Besides, students do not need to download additional apps because they are built into Facebook's Messenger platform.

Language developing expectations

The research team chose to use the Javascript language running on the Node.js platform to program the operating system for the Chatbot. The Javascript language on the Node.js platform is open source and is an environment for network servers and applications. Node.js applications are written in JavaScript language. Node.js uses the Google V8 JavaScript engine for code execution, and a large percentage of the underlying modules are written in JavaScript.

Node.js provides an event-driven architecture and non-blocking I/O API, optimizes application throughput, and is highly scalable. Node.js has a fast processing speed thanks to the asynchronous processing mechanism (non-blocking). Therefore, it can easily handle thousands of connections in the shortest amount of time.

Activities of Chatbot to learn Chinese vocabulary at elementary and intermediate levels

The Chatbot for learning elementary and intermediate Chinese vocabulary Chatbot acts with users via audio or text and uses Facebook's Messenger API platform to communicate with users. The part that the research team needs to develop includes:

Translator: Translating the user's request to help the computer understand the request that needs to be performed. The intent and entities included in the request are extracted to form the basis for determining the response. Natural language processing techniques are applied to analyze user requests semantically.

Processor: Process user requests based on data provided by Translator. The answer will be retrieved from Chatbot's database. Depending on the technique used, the accuracy of the answer will vary.

Response: Receive output from Processor and return the corresponding result to the user on Facebook's Messenger platform.

Developing Chatbot database

The source of developing data for training Chatbot is the vocabulary data in the Boya books for beginner and intermediate level, volume 1 and volume 2, which are currently being used as teaching textbooks at Hanoi University of Industry and many other universities. A conversation

between a Chatbot and a user to serve the needs of learning and practicing Chinese vocabulary at elementary and intermediate levels is as the following example:



Figure 3. Conversation model between Chatbot and user

Thus, with the problem of developing training data for Chatbot capable of asking questions and assessing learners' answers related to Chinese vocabulary at elementary and intermediate levels, the research team must build a dataset of Chinese vocabulary at elementary and intermediate levels taught in the Boya books for beginner and intermediate level, volume 1 and volume 2. To help users practice the most with the vocabulary contained in the lesson, the team needs to create a list of important vocabulary words from data related to vocabulary such as words, pinyin pronunciation, pronunciation sample sounds, Sino-Vietnamese words, meanings, synonyms, antonyms, compound words, examples, etc. For each vocabulary, it is necessary to build sample questions for users to practice. Question types include: (1) Give a Chinese word, choose the corresponding pinyin pronunciation; (2) Give a word, choose the corresponding meaning; (3) Fill in the blank; (4) Give a Vietnamese meaning, choose the corresponding Chinese word (4) Give the pronunciation of a word, choose the corresponding word.

In addition, for the purpose of helping users in the process of learning Chinese vocabulary, Chatbot also provides a Chinese-Vietnamese dictionary to help users quickly look up words in the Chinese-Vietnamese dictionary. Currently, the team has developed a dictionary data of 151,624 Chinese words, including words of different levels. This vocabulary dataset is taken from Lingoes dictionary - a multilingual online dictionary data source.

Basic functions of Chatbot

ChatBot has the potential as a language learning tool, especially for learning Chinese vocabulary (Kumar, R., & Ali, M. M., 2020). In order to allow users to practice Chinese vocabulary online during their learning, the Chatbot is developed with the following basic functions: Vocabulary Chatboting, Dictionary checking, and vocabulary revising. These functions are also mentioned in other research by Chen, H. L., Vicki Widarso, G., & Sutrisno, H. (2020).

First, vocabulary learning function. With this function, the vocabulary is organized into corresponding lessons in the Boya textbooks for beginner and intermediate levels. Each lesson includes some important vocabulary of the lesson. For each word in the lesson, there may be the following items of information: (1) Words; (2) Pinyin pronunciation; (3) Sino-Vietnamese words; (4) Vietnamese meaning; (5) Synonyms; (6) Antonyms; (7) Compound words; (8) Sample pronunciation.

Second, the dictionary look-up function. Users enter the word they want to look up and send it like sending a Messenger message. Chatbot will look up the dictionary and display the search results in the database, including (1) Words; (2) Pinyin pronunciation; (3) Sino-Vietnamese words; (4) Examples corresponding to each different meaning/field of meaning; (5) Sample pronunciation; (6) Pen strokes order to write letters; (7) Synonyms; (8) Antonyms; (9) Compound words. There is also an option to memorize words to rehearse words later. For words that have not been memorized for practice, there is an option to "save". With words that have been memorized, but the user wants to not need to save to learn again, there will be an option to "skip".

Third, vocabulary practice function. This function will have two options: practice words by lesson and general practice. The method is the same as for practicing vocabulary by lesson. Practice words by lesson: The user chooses a lesson and answers the questions corresponding to the words in that lesson. It will be given 1 point for each correct answer and deducted 1 point for the wrong answer. That score is used to assess the proficiency of the respective vocabulary. General practice: it will choose from the list of words the user has practiced before or the words that the user has memorized while looking up the dictionary or a set of words with the lowest proficiency level to practice. When each exercise is finished, the user will be shown the time to do the test and evaluate the preliminary results of the entire lesson. Users can rehearse what they have just done to improve results if desired.

Using a database management system (database) MySQL

MySQL is the world's most popular free and open-source database management system and is very popular with developers in application development. MySQL is a high-speed, stable, easy-to-use database management system. It is also portable, works on many operating systems, and provides many powerful utility functions. With high speed and security features, MySQL is well suited for applications that access databases on the internet. MySQL has many versions for different operating systems: Win32 version for Windows, Linux, Mac OS X, Unix, FreeBSD, NetBSD, Novell NetWare, SGI Irix, Solaris, SunOS, etc. Users can download MySQL for free from the homepage.

MySQL is one of the very basic examples of a Relational Database Management System using Structured Query Language (SQL). MySQL is used to support NodeJs, PHP, Perl, and many other languages as a place to store information on web pages written in NodeJs, PHP, or Perl,... MySQL is not the only Relational Database Management System (RDBMS) on the market, but it is indeed the most popular one, only after Oracle Database, when it comes to key parameters such as the number of searches and user profiles on LinkedIn, as well as the amount of discussion on internet forums. What is the main reason for the dependence of many tech giants on MySQL? The important reasons are as follows: Flexibility and Ease of use; High performance; Industry standards; Safety.

Using railway.app platform for system deployment

Railway.app is a Cloud platform based on Container as a (Paas) Platform as a Service. Developers use Heroku to deploy, manage, and scale modern apps. The platform is flexible and

easy to use, providing developers with a simple way to bring to market. It helps developers focus on product development without worrying about running servers or hardware. Therefore, the research team chose to use the railway.app platform for system deployment for the research topic.

The Railway.app platform has the following outstanding features. It provides for the smart containers in which the application will be run. Handles all configuration, load balancing, orchestration, backup, logging, security, etc. This is a tool capable of managing teams and combining many programmers together to be able to build better software. Railway.app has the ability to scale the application instantly, both vertically and horizontally.

Add-ons can extend, enhance and manage your applications with built-in services such as New Relic, MongoDB, SendGrid, Searchify, Fastly, Papertrail, ClearDB MySQL, Treasure Data, etc. When integrated with Github, you can easily deploy versions from a pull request, push, commit, etc. Thanks to features of monitoring and integrating traffic, response times, memory, as well as CPU and error loads, you'll always know how your application is doing.

Research gap

It can be seen that Chatbot (CLT) is one of the most powerful tools for helping students to study Chinese easily. Previous studies mainly focused on how to develop the Chatbot system rather than evaluating the effectiveness and satisfaction of Chatbots in teaching and learning. Therefore, this paper will show many good features as a support for learning and revising Chinese vocabulary, particularly at Hanoi University of Industry.

Methodology

This study uses a quantitative research method. The authors use Microsoft Excel to collect and analyze data after questionnaire delivery. The content of the study related to (1) the evaluation of the ability to provide a vocabulary of Chatbot Chinese Learning Technology (Chatbot CLT); (2) the evaluation of the users' satisfaction level with the "vocabulary learning" function of CLT; (3) the evaluation of the users' satisfaction level with the "vocabulary practicing" function of CLT; (4) the evaluation of the users' satisfaction level with the "Chinese-Vietnamese Dictionary" function of CLT; (5) the overall user's rating of learning Chinese vocabulary through CLT. The study's subjects include 101 students majoring in the Chinese Language at Hanoi University of Industry.

Results & Discussion

The study results on the ability to provide a vocabulary of Chatbot CLT

The study's results on the ability to provide a vocabulary of Chatbot were made by analyzing the question "Does Chatbot CLT system Chatbotting Chinese vocabulary learning at elementary and intermediate levels according to the Elementary Chinese Boya curriculum (episodes 1 and 2) and Intermediate Chinese Boya I curriculum (episode 1 and 2) provide vocabulary sufficiently to you?"

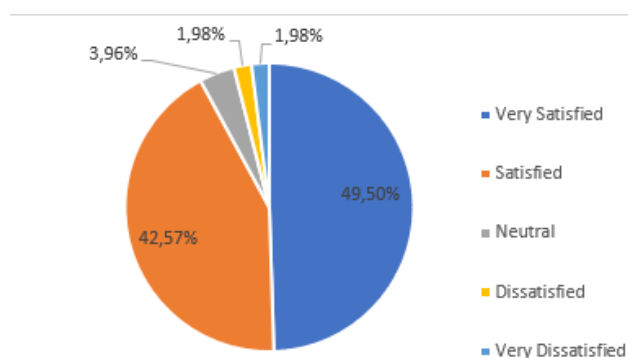
Table 1. Students' opinion about the ability to provide a vocabulary of Chatbot (CLT)

No.	Students' opinion	Rate (%)
1	Provide all vocabularies	60,4 %
2	Provide all basic vocabulary	37,62 %
3	Lack many important vocabularies	1,98 %

The results indicate that 37.62% of people surveyed think that Chatbot CLT provides almost all the vocabulary in the lesson. In contrast, the percentage of people surveyed who think that Chatbot CLT fully provides a basic vocabulary in the lesson is 60.40%. Only 1.98% of people surveyed think the Chatbot CLT lacks many important vocabularies. It means that the ability to provide all the basic vocabulary in the lessons of Chatbot CLT is grounded and appreciated by the majority of users.

The study results on the users' satisfaction level with the "vocabulary learning" function of Chatbot CLT

The study's results on the user's satisfaction level towards the "vocabulary learning" function of Chatbot CLT were made by analyzing the question, "Please rate your satisfaction level with the "vocabulary learning" function of Chatbot CLT?"

*Figure 1. Students' satisfaction with the "vocabulary learning" function of Chatbot (CLT)*

The results indicate that: 49.50% and 42.57% of people feel "Extremely Satisfied" and "Satisfied" with the "vocabulary learning" function, respectively (account for 92.07% in total), whereas the proportion of people having "Neutral" evaluation for this function is 3.96%. By contrast, the percentage of people choosing the option of "Dissatisfied" and "Extremely dissatisfied" was 3.96% (with 1.98% for each option). On the 5-point scale, the average "vocabulary learning" function score is 4.36. This score illustrates that the "vocabulary learning" function is assessed at a good level.

Regarding the users' satisfaction level with the "vocabulary learning" function, in cooperation with the evaluation of the ability to provide a vocabulary of Chatbot CLT, the results in the statistical table show that the users who feel "Dissatisfied" and "Extremely dissatisfied" about the "vocabulary learning" function are not in the group of users who rate the Chatbot as lacking in vocabulary. In this way, it could be concluded that the assessment of "vocabulary learning" of users does not depend on the ability to provide a vocabulary of this function but on the users'

actual experience. This is the basis for thesis development, in which the research team focuses more on developing the interfaces and users' experience with this function.

This above assumption is confirmed again when there is a suggestion for improvement in the comments: "It is recommended that it shall apply other approaches instead of this simple method" from a user choosing the "Dissatisfied" option.

In addition, regarding the "vocabulary learning" function, the research team has received many suggestions for improvement, such as users wanting to build vocabulary on more curriculums to meet the diverse learning demand. In particular, users also want the research team to add a variety of vocabulary sets so that users can learn a large number of words. Besides, the vocabulary learning section should improve the interface to be more beautiful and have more images, examples, sentence patterns, word forms, etc.

Based on suggestions to improve Chatbot, the research team will continue to improve the "vocabulary learning" function in the near future to serve the Chinese learning students.

The study results on the users' satisfaction level with the "vocabulary practicing" function of Chatbot CLT

The study's results on the user's satisfaction level towards the "vocabulary practicing" function of Chatbot CLT were made by analyzing the question, "Please rate your satisfaction level with the "vocabulary practicing" function of Chatbot CLT?"

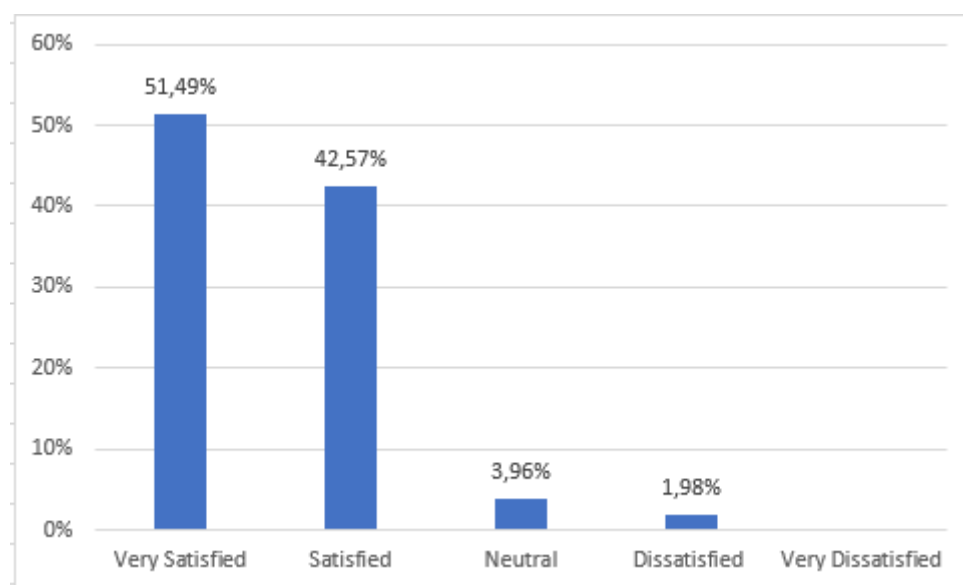


Figure 2. Students' satisfaction with the "vocabulary practicing" function of Chatbot (CLT)

The results indicate that: 51.49% and 42.57% of people feel "Extremely Satisfied" and "Satisfied" with the "vocabulary practicing" function, respectively (account for 94.06% in total), whereas the proportion of people having "Neutral" evaluation for this function is 3.96%. By contrast, the percentage of people choosing the option of "Dissatisfied" was 1.98%. On the 5-point scale, the average "vocabulary practicing" function score is 4.44. This score illustrates that the "vocabulary practicing" function is assessed at a good level.

Considering the relationship of satisfaction between the "vocabulary practicing" function and Chinese proficiency of the respondents, it could be seen that: the majority of those surveyed with "Neutral" and "Dissatisfied" ratings belong to the group with language proficiency at HSK3-4 and HSK5-6 levels. This result shows that, with Chinese vocabulary training, users

with higher HSK levels often have stringent requirements for learning methods. Regarding user contributions to the development of the "vocabulary practicing" function, the research team has received great support and many comments to improve and upgrade for future versions of the product.

Many users evaluate that the sound (pronunciation) function of the "vocabulary practicing" function is not really good and needs to be improved. In addition, this function should create many types of tests to help readers get more effective learning methods. Test items can be divided into many different levels so that users can choose according to their ability. In particular, the research team should add HSK vocabulary tests that are also extremely effective for users

The study results on the users' satisfaction level with the Chinese – Vietnamese dictionary function.

Evaluating the users' satisfaction with the "Chinese- Vietnamese Dictionary" function is carried out by the following question "Please evaluate your satisfaction with the Chinese- Vietnamese Dictionary function of Chatbot CLT?"

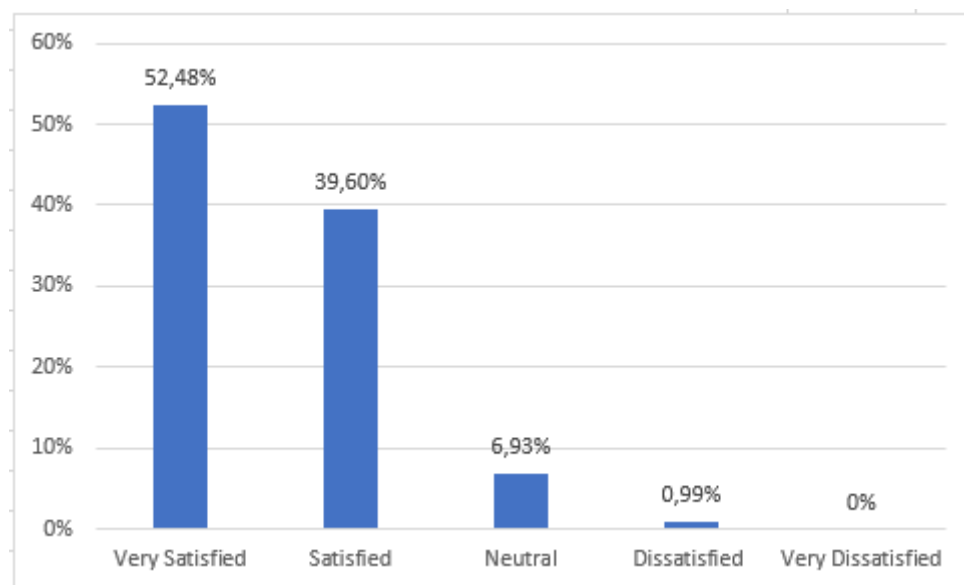


Figure 3. Students' satisfaction with the "Chinese- Vietnamese Dictionary" function of Chatbot (CLT)

The result showed that 52,48% of users felt "Very satisfied" while the proportion of users who felt "Satisfied" reached 39,60%, a total of 92,08%. There are 6,93% of people had a "Neutral" opinion, while only 0,99% of users "Dissatisfied" with this dictionary function. The average result reached 4,4/5 points. This is a high level of user satisfaction.

In terms of satisfaction in a different group of people, the number of people who felt "very satisfied" or "satisfied" made up 97,5 % in HSK 1-2 level, 93,69% in the HSK3-4 level, 80% in the HSK5-6 group. As a result, there was a decrease in users' satisfaction with the dictionary function.

When studying more about the user's constructive feedback through different HSK level groups of people, it can be seen that there is an increase in users' requirements of the dictionary function with their HSK level.

The reason for this phenomenon was that the users wanted more vocabulary, especially difficult vocabulary which were not mentioned in Chatbot CLT.

There is a lot of constructive feedback about improving the dictionary function, such as updating more vocabulary and classifying vocabulary in specific sections. Besides, many people would use this dictionary to translate words easily.

Users' evaluation of learning Chinese vocabulary through Chatbot CLT

In terms of the most favorite function on Chatbot, 45,54% of people chose the learning vocabulary function, 34,65% of users agreed with vocabulary revision, and 19,80% of people liked the dictionary function.

Table 2. Students' opinion about the most favorite function of Chatbot (CLT)

No.	The most favorite function on Chatbot (CLT)	Rate (%)
1	vocabulary learning function	45,54%
2	vocabulary practice function	34,66%
3	Chinese-Vietnamese dictionary function	19,80%

There is a different result compared with the average score on the satisfaction scale (at 4,36; 4,44; 4,44). It showed that although there were some problems related to the "Vocabulary learning" function, it still helped students to study better. Most of the learners were young generation students who were at an elementary and intermediate level. It was very easy to use a smartphone as a vocabulary notebook to study Chinese at all times. The result also contributed to the way of improvement to help Chinese learners in general, and students in particular when using Chatbot CLT.

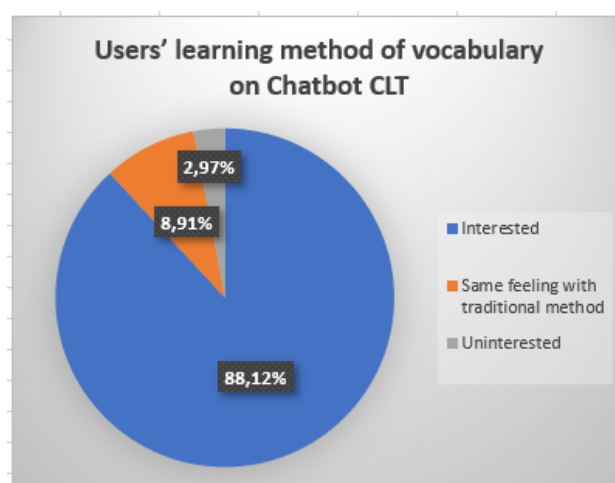


Figure 4. Students' satisfaction with the learning method on Chatbot (CLT)

When evaluating the users' learning method of vocabulary on Chatbot CLT, the result showed that the number of students who felt interested in studying on Chatbot accounted for 88,12% while 8,91% of users had the same feeling compared to the traditional learning method, and 2,97% of users felt uninterested in this method.

With 2,97% of users who were uninterested in learning Chatbot CLT, there were 33% for difficulties in using Chatbot, while 66% of users felt easy to use this app. This result illustrated that users' experience and interface played an important role in exploiting languages and technology.

Regarding the effectiveness of the Chinese learning method, Chatbot CLT was considered a useful way to inspire students when practicing.

Table 3. Students' opinion about the interface of Chatbot (CLT)

No.	Student's opinions	Rate (%)				
		Very satisfied	Satisfied	Neutral	Dissatisfied	Very dissatisfied
1	Users' interaction with Chatbot CLT	58,42%	35,64%	4,95%	0,99%	0%
2	The user-friendly interface of Chatbot CLT	59,41%	34,65%	5,94%	0%	0%
3	Effectiveness of using Chatbot CLT	45,54%	47,52%	4,95%	1,98%	0%
4	Summary of users' satisfaction with Chatbot CLT	48,51%	46,53%	3,69%	0,99%	0,28%

Regarding the way of user interaction, the number of users who agreed with "Very satisfied" were 58,42%; 35,64% of users for "Satisfied", a total of 94,06%. 4,95% of users felt "Neutral" and 0,99% "Dissatisfied". The average score was 4,51/5.

Similarly, the user-friendly interface marked a highlighted point. There was no one felt "Dissatisfied" with Chatbot. In particular, there were 59,41% of users felt "Very satisfied", 34,65% "Satisfied", and 5,94% "neutral". The average score was 4,53/5.

It can be seen that it was easy to use Chatbot because it was integrated into Facebook Messenger. This practice could help students learn Chinese as an online daily communication platform. However, operating on Messenger was a limitation for users because some people have not followed and understand the instruction of this channel, which led to skipping some special functions. The result of the questionnaire showed that it was about 93,06% of users satisfied with Chatbot CLT, including 45,54% with "Very satisfied," 47,52% with "Satisfied," while there were 4,95% of users for "Neutral" and 1,98% for "Dissatisfied" with Chatbot. The average score was 4,37/5.

In general, there were 48,51% of users felt "Very satisfied", 46,53% "Satisfied", 3,96% "Neutral," and 0,99% for "Dissatisfied" with Chatbot CLT. The average score was 4,42/5.

Besides these above evaluation indexes, the Chatbot also received a lot of comments from users. In general, the idea of a Chatbot was highly evaluated. However, there were a lot of recommendations related to add-on functions such as grammar, dictionary, majoring

vocabulary, and even mistakes. Also, many people would like to have a vocabulary revision section to give a better experience on Chatbot. Currently, it is quite inconvenient when users want to revise vocabulary by pressing the exit button. Especially, unlike the smartphone, when studying vocabulary on computers, there were no sweeping functions to move on to other sections.

A lot of users also would like to have more databases related to books in different areas, which would enhance people's interests. Also, some people showed their concerns about interactive Chatbot systems between people. That practice could create competition as well as interest for users.

In general, after conducting a survey with 101 users of Chatbot CLT, the authors received a lot of positive as well as constructive feedback, which could help authors give a more practical improvement in the future. This feedback and comments would be considered to have a better experience in the latest Chatbot version.

Discussion

The research results showed that from the students' perspectives, Chatbot (CLT) generally contributed to improving students' Chinese comprehensibility in terms of both vocabulary and grammar. The most obvious enhancement could be seen in the student's report of the increased employment of such Chinese languages, such as vocabulary practice, user-friendly interface, and user interaction. The positive effects of Chatbot on facilitating the growth of learners' attitudes toward increasing their vocabulary when learning Chinese have also been reported in some previous studies (McCarthy, J., Minsky, M. L., Rochester, N., & Shannon, C. E. (2006); Rich, E., Knight, K., Winston, P. H., Luger, G. F., Jackson, P., Nilsson, N. J., ... & Schalkoff, R. J. (1991). The findings of these previous studies indicated that the Chatbot using artificial intelligence must consistently establish to build up vocabulary at a different level. In this research, it can be seen that Chatbot (CLT) could be used in order to develop students' vocabulary. In other words, the Chatbot is often used as a platform to get more vocabulary for students when studying the Chinese language.

Conclusion

Through the survey and analysis of information collected from 101 users of different target groups about the level of satisfaction when using Chatbot, it can be found that: (1) Chatbot learning vocabulary brings good inspiration for learners, it is not only easy user-friendly but also practical for learning outcomes; (2) Users are interested in Chatbot's vocabulary and its ability to provide vocabulary so that users can study all the time without carrying books; (3) The higher the level of Chinese the user has, the more rigorous the requirements are in vocabulary practice, especially the requirements for learning forms, as well as the requirements of providing vocabulary when looking up the dictionary; (4) Application interface and user experience have great significance, greatly affecting emotions in the learning process and learning results.

Learning Chinese vocabulary at elementary and intermediate levels according to the Boya Chinese curriculum through Chatbot CLT is a new learning method, catching up with the trend of the 4.0 era and helping users to learn at any time. Chatbot CLT has a variety of review methods and an easy approach. Users do not need to install or download additional software to

a computer. The interface of Chatbot CLT is very friendly and easy to use. It meets the basic needs of users, inspires good learning, and has high learning efficiency. However, to improve Chatbot CLT's effectiveness, the research team needs to focus on developing the corpus, vocabulary resource, and user interface and creating a friendly and flexible approach for people.

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Students' Challenges on Learning EMI Courses at a Technical University in Vietnam: An Investigation from Students' Voices

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ABSTRACT

Keywords: English as a Medium of Instruction, EMI implementation, tertiary curriculum, challenges, students' perspective

In the age of technology development and internationalization, EMI (English as a Medium of Instruction) has been seen as a better method for resolving language problems of non-English students than teaching English in a single subject so as to meet the demand for employability in their future profession. However, EMI implementation is still a concern for educational researchers and instructors in many countries, especially in Asian Pacific regions. This research aimed to investigate EFL students' perspectives and challenges in learning an EMI program at a public technical university in Vietnam. To determine the obstacles of EMI learning from students' viewpoint, data were collected qualitatively by in-depth interviews with 18 EMI students in nine different academic disciplines randomly. The findings shed light on EMI implementation for tertiary education, as their perspectives on EMI courses' benefits are quite positive. However, this study also figured out several challenges due to students' poor ability in English interaction, vocabulary shortage, irrelevant course content, EMI lecturers' pedagogical methods, and students' motivations for the EMI course. This study provided some recommendations to help those interested in EMI in higher education enhance and develop EMI courses.

Introduction

The English language has proven its crucial role in all aspects of society, from the economy and industry to education as the international means of communication (Wright, 2004; Crystal, 2006; Tamtam, Gallagher, Olabi, & Nasher, 2012). In addition, it has been popularly accepted as a main medium of instruction in numerous tertiary education programs in many universities in the world. As a result, English as a medium of instruction (EMI) has been established as the most pervasive variety of substances and language-integrated learning at universities of non-native English-speaking nations (Hung & Lan, 2017; Rose et al., 2020; Lin & He, 2019). For instance, plenty of European universities testified the remarkable success in implementing EMI for the reasons of globalization, international employability, student exchanges, and the

qualified market needs of international students (Ammon & McConnell, 2002). In the case of Asian countries, EMI has been known as exemplifying the deeply crucial importance featured in English competence (He & Chiang, 2016). The fundamental goal of the EMI is to outfit public staff with both professional skills and capacity for global integration. In the meantime, researchers have identified certain issues about the EMI programs' implementation, including insufficient administrative support, challenges in planning educational programs, teaching methodology, teachers' and students' limited language ability, cultural discrepancies, and social divide (e.g., Coleman, 2006; Hamid et al., 2013).

Nonetheless, it seems obvious that EMI implementation remains a challenge to all the stakeholders, specifically the learners. According to Byun et al. (2011) and Tong and Shi (2012), the learning content in their EMI subjects appears to be very difficult for students to understand and master, which causes their growing anxieties in their EMI context. In addition, EMI courses have also brought students considerable challenges in lecture comprehension, textbooks or course materials available, tests and exams, interactions and discussion in the classrooms, lecturers' proficiency in language and EMI (Chang, 2010; Al-Bakri's, 2013; Lasagabaster et al. 2018; Tamtam et al., 2012; Lee, Davis & Li, 2021).

In Vietnam, EMI has been regarded as an educational innovation to meet regional and international criteria with the goal of ranking some of the world's top Vietnamese institutions by 2020 (MOET, 2008). Various EMI programs have been introduced and implemented at different levels of education sectors in Vietnam. Those programs have achieved extraordinary results, such as improving students' English language proficiency and professional knowledge, expanding job opportunities, fostering partnerships with foreign universities, and attracting international students (Dang et al., 2013; Le, 2012; Nguyen et al., 2016; Vu & Burns, 2014; Tran, Burke, & O'Toole, 2021). Recently, considerable literature has grown around the theme of EMI implementation in the Vietnamese context to explore the effectiveness of EMI courses and the stakeholders' attitudes toward EMI (Nguyen et al., 2016; Sercu, 2021; Tran, Burke, & O'Toole, 2021). However, little is known about Vietnamese technical students' perspectives towards their EMI learning and what factors students find themselves challenging in their EMI courses, which needs more investigation. Therefore, in recognition of this gap in the literature, this study sought to explore the technical students' viewpoints about (i) their EMI learning experience and (ii) the challenges they faced in their EMI courses. To properly understand the students' opinions about their EMI courses and their own struggling challenges, a qualitative content analysis of in-depth interviews with 18 EFL students in nine discipline academic subjects at a public university in Vietnam was conducted right after they completed their EMI subjects.

Literature review

English as a medium of instruction

English as a Medium of Instruction (EMI) refers to the adoption of the English language in teaching content knowledge in academic subjects in non-native English-speaking nations or

nations where English is known as the second or foreign language (Dearden, 2014; Macaro, 2018; Madhavan & McDonald, 2014; Phuong & Nguyen, 2019; Vu & Burns, 2014).

Some studies defined EMI with the bilingual approaches according to the amount of English used in comparison with the native language in that the courses were instructed (Dearden, 2014; Hamid, Jahan, & Islam, 2013; Wannagat, 2007). For instance, Swain and Johnson (1997) classified EMI into two versions full EMI, in which only English was used in the curriculum, and partial EMI, in which English can be taught less than 50% of the EMI curriculum. Moreover, in some other studies, EMI was considered as a teaching and learning approach that focuses on academic subjects through the medium instructions in English, which focused on not only content knowledge but also the English language in terms of communication and cognition (Marsh & Laitinen, 2005; Phuong & Nguyen, 2019; Tamtam et al., 2012).

In order to address the objective of this study, EMI was seen similarly to Yen and Thong (2019, p. 89) as an "innovative approach" in which English is used as the medium instructed by non-native lecturers to teach academic disciplines to EFL students.

EMI implementation

As a result of internationalization and globalization, EMI has been expanded in all continents at all levels of educational settings (Dearden, 2015; Galloway et al., 2020; Macaro et al., 2018). EMI teaching and learning has been widely applied in Education in Europe, Asia, and Africa by virtue of recognizing its inevitable benefits.

In Europe, according to Madhavan and McDonald (2014), EMI adoption in tertiary Education in France was common, particularly in major programs taught in English, such as business, sciences, and social studies. The main objectives were to create a new generation of students who were scientifically and technologically educated and conversant in English (Kirkpatrick, 2014). For instance, in Norway, the number of EMI programs at the master's level at the University of Oslo was estimated to have increased significantly between 2003 and 2009, from 40 Masters' projects to 800 distinct courses and projects (Hellekjaer, 2010). In Turkey, EMI was also noted as a workable solution for non-native English nations to 'survive in the international market' (Collin, 2010, p.97). In another research conducted by Tatzl (2011) at an Austrian university, the EMI master program was investigated, and it was reported that the participants expressed a positive perception of the effectiveness of their EMI courses on their English language competence, especially in speaking skills. Hence, EMI was noted as offering the "greatest benefits" of EMI in student encouragement and language skill development.

Regarding the Asian implementation of EMI, in 2005, 74 EMI graduation projects in Japan were submitted to 43 Japanese colleges (Huang, 2006; Manakul, 2007). As part of the public-sector-funded "Global 30 Project," the Japanese government planned to create EMI arrangements for 157 projects by 2014 (Huang, 2006). As a result, in 2017, EMI was employed at over 300 universities in Japan (MEXT, 2017). Meanwhile, in Korea, all the tertiary educational levels have introduced and applied EMI courses to foster students' English competencies for their global working situation in the future.

In Vietnam, EMI has been received at the tertiary level for several years at various open and private colleges and some high-level instructional classes. This work has been in pilot at the

auxiliary level since 2013 in roughly 20 gifted schools, with one to two weekly math and science assignments (Le, 2016).

EMI for natural scientific studies in some schools has been decided by the Ministry for Education and Training since the academic year 2011-2012 (MOET, 2013). It is a part of the National Foreign Language 2020 project, which aims to ensure that Vietnamese students can keep up with scientific and technological advancements, mostly published in English, and students can practice their English and improve their language skills (MOET, 2013). According to a poll by British Council in 2014, Vietnam was seen as a trending country in the use of English as a tool in all stages of education, including elementary, secondary, and higher Education (Dearden, 2015).

EMI projects in Vietnam, called advanced university programs, have been implemented since 2008. The rise of the task "Advancement to Vietnamese higher education" (Announcement number 14/2005/NQ-CP dated 2nd November 2005) was a major political step towards these programs of public authority (The Government of Vietnam, 2005). In fact, 23 Vietnamese universities have adopted 35 EMI programs in diverse fields of study around the country (Nguyen & Pham, 2017). According to the literature on EMI programs in Vietnam, plenteous benefits of EMI implementation have been gained, such as improving students' English language skills and professional knowledge, expanding job opportunities, establishing international partnerships, and attracting international students (Dang et al., 2013; Le, 2012; Nguyen et al., 2016; Vu & Burns, 2014).

The universities in Vietnam consider EMI to improve the quality of scholarly research and education, generate qualified alumni for the country's industrialization and modernization, and compete for student enrolment and remuneration with other higher education institutions (Manh, 2012).

In short, despite the popularity of EMI implementation in the world, the students' challenges in learning EMI have been under-recognition in various issues of students' English competencies, their language skills, and their expressions of content knowledge based on different contexts, from Europe to Asia, at all educational levels.

Students' challenges in EMI learning

The rapid growth of EMI in non-English speaking nations has resulted in a substantial corpus of study. This study reviewed the challenges of students' interactions at EMI classes, vocabulary shortage, course content, EMI lecturers' pedagogical methods, and students' motivations in this session for our investigation. The study's findings revealed a significant number of issues that students confront when learning lectures provided in English (Airey & Linder, 2006; Byun et al., 2011; Chang, 2010; Evans & Morrison, 2011a, 2011b; Hellekjaer, 2010; Klaassen & Graaff, 2001; Miller, 2009; Taguchi & Naganuma, 2006; Vinke et al., 1998).

Interaction in EMI class

According to some research (Pun & Macaro, 2019; Sahan et al., 2021), the student's interaction with their teachers appeared to be limited, which made the students lack opportunities to present and express their content knowledge in EMI lessons. As a result, the students seemed to take a

largely passive role in their EMI classrooms. Similar findings were also pursued by Kaur (2020) 's qualitative research as the researcher revealed three key issues of students' passiveness, their ignorance of other people's contributions to interactions, and code-switching into the majority language. Meanwhile, similar findings of the interactions contributed to content and language learning were also disclosed in An, Macaro & Childs (2021).

Vocabulary shortage

According to Chang (2010), vocabulary plays an essential role in the ability to acquire the EMI lecture content. However, due to unclear context and misunderstanding expressions, students had to overcome plentiful problems in acquiring adequate vocabulary knowledge (Keuk & Tith, 2013). This obstacle may cause students to lose track of lecture content and be unable to take notes. Hence, they have to wait to copy what their teachers write on the board later then.

Course content

As mentioned in students' lack of vocabulary, course content in EMI poses great challenges to students' EMI learning. Several research confirmed that EMI students encountered considerable difficulties in comprehending their EMI course content in terms of expressing opinions, listening, reading, and writing related to their EMI course knowledge (Le, 2016; Macaro et al., 2018; Pun & Jin, 2021; Vu & Burns, 2014, Tran, Burke, & O'Toole, 2021). According to Bielenberg (2004), EMI students had challenges in tertiary Math and Science courses due to vocabulary problem issues. In addition, Pun and Jin (2021) revealed that students faced challenges in employing acceptable lexical words, organizing their opinions, and applying proper grammar in their EMI courses.

EMI lecturers' teaching methods

With the significant expansion of EMI programs, numerous studies have examined teaching methods in EMI contexts from teachers' perspectives (Thompson & McKinley, 2018; Tange, 2010; Yuan, 2021). Most of EMI teachers reported that they faced challenges in lecturing EMI due to their L2 language competence, especially their ways of expressing ideas and finding equivalent terms for content knowledge (Le, 2016; Tange, 2010). In addition, Thompson and McKinley (2018) noted that many EMI teachers have the propensity to concentrate solely on a topic while providing very little linguistic help in their instruction. This can be largely attributable to the ineffectiveness of the present EMI teacher preparation program, which seems to provide content teachers with poor language and literacy training within or outside of their own field (Lasagabaster et al., 2018). However, these issues of EMI lecturers paid less attention to students' views. They still found that their EMI teachers did their best to lecture EMI with understandable content explanations and clear L2 expressions during their lessons (Le, 2016; Hung & Lan, 2017).

Students' motivations

There have been demands for research (Doiz, Lasagabaster & Sierra, 2011; Pokay & Blumenfeld, 1990; Stoyhoff, 1997) to examine the connection between acquiring content through the L2 and motivation for language learning. The key rationale is that more motivated students might choose to engage in English topic study on their own, and this motivation might

contribute to their success. This finding was relevant to the one presented by Le and Nguyen (2022), which confirmed that students' motivations play a crucial role in their engagements and their satisfaction with EMI courses. The more motivated students become in their EMI learning, the more successful they may be in their EMI courses (Rose et al., 2019).

In Vietnam, EMI has been increasingly focused on in the tertiary education system with the attempt to internationalize and attain the higher-ranking quality of the universities. In spite of the development of EMI teaching and learning, it is still argued how students are perceived when they learn EMI and what obstacles they encounter in their EMI, especially for technical students – who are consumed with a lower level of English competence than others. As a result, this research was conducted in an attempt to bridge this research gap in the EMI learning context.

Methodology

The current study aimed to answer the two following research questions with the aim of exploring the students' perspectives towards EMI learning and what challenges they are facing in their EMI learning:

RQ1. What are the students' perspectives toward their EMI learning?

RQ2. What challenges did the technical university students encounter in their EMI learning course?

A qualitative analysis of in-depth interviews with 18 technical students was conducted. All of those students were sampled randomly. They were from nine different EMI classes and were asked for the agreement to join in the interviews. They were interviewed after they completed their EMI courses. Their academic disciplines were CNC Technology, Professional Experience and Career Planning, Software quality assurance, Face detective technique, and Transmission Technology. Five of them were female, and the rest of 13 were male. Due to the COVID-19 pandemic, all the interviews were conducted virtually via the technological tools of Zalo video calls and Zoom video conferencing. 10 interview questions of their personal introduction, their EMI description, their EMI learning experience and challenges, and recommendations were asked in Vietnamese – their first language in order to easily understand and express opinions. All the interviews ranged from 12 to 17 minutes per one. Afterward, the data was recorded, numbered from S#1 to S#18, then transcribed into English with the support of some experienced colleagues at my university. Then, the data were analyzed and categorized into common themes with the aim of deeply exploring the students' perspectives, experiences, and factors affecting them in their EMI implementation.

Results/Findings and discussion

In this part, the findings were presented in categorization and thematic analysis from students' interviews in three main aspects: (i) the reasons why the interviewed students chose to study EMI, (ii) their perspectives towards EMI learning, and (iii) their challenges during EMI learning.

Students' reasons for enrolling in EMI classes

Regarding the reasons for taking EMI courses, it should be noted that this is the first time students have been offered to choose to study their academic subjects in English at this university. Therefore, many reasons for the students' choices to register for an EMI course were disclosed.

The most significant reason from the interview data revealed by more than half of the interviewees (12 out of 18) was that the subjects were one of the compulsory subjects that they had to study in their curriculum. The S#2 reported that *"we have no choice as this is the obligatory subject required in our program for semester 7 so that we can graduate and get the Bachelor's degree within 4 years"*. Nevertheless, some students (6 out of 18) revealed that they selected to study the EMI courses because they were aware of the usefulness and benefits they could gain from them for their study and future career, together with the improvement in their English language competencies.

"I chose to study this EMI course so that I can enhance not only my English language but also my major knowledge for my future job. Honestly, I don't like learning English but I still selected this subject in English version to improve both my English skills and my major so that I may be confident and get great advantages with my job interviews in the future..." (S#6).

Meanwhile, only one of the interviewed respondents expressed the reason for intending to study and work outside of Vietnam. Some of the students shared their opinion when selecting EMI courses:

"Well, I did not know this course would be implemented in English. I logged in and enrolled on the course on the online system as usual. However, at the first lesson of the course, the lecturers told us this course was implemented in English. We, at first, were so surprised and quite nervous, but we thought this would be a good chance for us to improve and practice our English besides learning our majors..." (S#12)

This reason was discussed in detail and resulted from the students' ignorance to their course registration. Some respondents said, *"Oh, I planned to learn this course during my first semester of the school year so I just clicked to choose without noticing it would be in English or Vietnamese..." (S#11, S#12).*

In short, the main reasons for taking EMI courses from the investigated students can be labeled as "a compulsory part of the program" and "benefit awareness for study and future career". However, these reasons were somehow different from the findings presented by Dieu (2021), which demonstrated both instrumental and integrative motivation as reasons for attending these EMI courses. This finding supports Le (2016)'s research on EMI implementation at private and public universities in Asian contexts.

Students' perspectives towards EMI learning

The role of the students in successful innovation is invariably accepted as important (Fullan, 2007). Therefore, it is essential to explore the students' perspectives to ensure the success of any innovative education plan. In the study, students were asked to share their perceptions about

how they feel about their EMI learning and whether the EMI program is beneficial to them or not.

As it can be thematically analyzed from the interviews that the benefits of EMI courses perceived by students were categorized into six aspects, the students' greatest concern for enhancement of academic vocabulary and technical terms for their majors turned out to be the first and foremost benefit when 15 out of 18 interviewees mentioned it. As shared by S#5:

"This course will create a new experience for technical students, and I will have more chances to know more technical terms in mechanical engineering as well as present my knowledge in English. This would create a very beneficial English learning environment for students."

The second biggest benefit from the interview data is the student's awareness of their ability to update their major knowledge during their EMI learning. 14 out of 18 students confirmed their positive perception that they could be more updated with the technological content knowledge that they learn from their EMI courses and materials. For instance, S#7 said:

"I actually like all the knowledge I can gain from my EMI course. I feel so updated with the content knowledge about the current application trend of Artificial Intelligence and Face Detective Techniques worldwide, which I can only find in some short Vietnamese articles or magazines."

or *"...I think that when I attended the EMI lectures for CNC technology course, I found more useful and informative technical knowledge than ever. At first, I thought it would be one of the hardest subjects in that semester and I even thought of failing this course. However, the more I learnt this EMI course, the more I found it beneficial and relevant to my majors. This subject is very good for me to learn both English and my content knowledge.." (S#14)*

Meanwhile, 12 out of 18 interviewees indicated learning EMI as an advantage for their future job. About two-thirds of the interviewed students indicated their beliefs about easier opportunities to get a job in the future with EMI learning experience:

"I believe that the knowledge I gain from my EMI course will help me much to get a better job in the future. I can also get more opportunities for a better position and higher salary if I can apply what I have learnt in my EMI course to my working performance in the future..." (S#8).

Moreover, one of the indispensable strengths of EMI courses is the benefit for students' language competence. The more deeply students delved into their EMI courses, the more they acquired their major knowledge as well as their English competence. From the interview data, 13 out of 18 interviewed students confirmed their improvement in English language proficiency through studying EMI courses. S#10 endorsed that

"One of the certain advantages of attending these EMI courses is English competence development. As I was aware that I had to understand my disciplines adequately, I had to read more materials in English. This made me more acquainted with English vocabulary and gradually improved my English, especially my reading skills..."

In addition, S#15 affirmed her internal motivation in learning English and major as a benefit of participating in her EMI course of CNC technology:

"As usual before, when I attended the English class, I was frightened of expressing my opinion or raising my voice in English. But when I had to register for my CNC major, I had to prepare much before my EMI class. I had to search and explore the knowledge for the topic and prepare our presentation so I had to practice my English well so that I can demonstrate my knowledge better. As a result, this became a really underlying motivation for me to improve my English."

Furthermore, 11 out of 18 respondents illustrated their confidence in their English communication after attending EMI classes.

"After a semester of learning, searching, and expressing my major in English for my EMI course, I think that my English communication is much better than ever before. Because my friends and I had to prepare much for our upcoming lessons, presentations, debates, and tests in EMI class, we became more familiar with English and speaking English in our class. This made us no longer afraid of speaking English in front of the teacher or classmates. We felt more confident in our communication in English..." (S#10)

In short, those favorable opinions on the advantages of EMI courses demonstrate that practically all students were completely aware of these benefits. Most of them concurred that the EMI course would greatly benefit their majors and English proficiency. This result was similar to Dieu's (2021) claim that EMI usage is increasing because English is a potent language of success. According to the data gathered, the EMI course is essential and well-regarded to students' university programs because of EMI's indisputable advantages. Previous research by Vu and Burns (2014), Dang et al. (2013), and Le (2012) also found that similar students' views of EMI were shared.

Students' challenges during EMI learning

From the interview data and analysis of the data, five challenges were categorized thematically as listed below: (i) the students' interactions in their EMI classes, (ii) the students' lack of vocabulary, (iii) irrelevant course content, (iv) the EMI lecturers' pedagogies, and (v) students' motivations in their EMI class. The results and discussion would be described and explained specifically in this part.

Students' motivations in EMI classes

This research raised interview questions 3 and 4 to explore how motivation affected and challenged students' EMI learning. The overall finding disclosed that students at first hardly felt motivated about their learning EMI due to compulsory registration, but later then, they found themselves more motivated in their studies thanks to the benefits they gained.

"Actually, at first, I wanted to register the Vietnamese Medium of Instruction (VMI) classes but there was no available room left so I had to register the EMI instead. I was quite nervous. But after the course, I found this would be an interesting experience in my study and I got much more benefits than I had expected." (S#16)

About two-thirds of the final-year students explained that "...because we studied English for 6 semesters in the first three years. At our final year before graduation, we did not have any chances to study English so we think that if we register for our EMI class, we can keep on learning and practicing our English in the related-major learning environment." (S#2). This resulted in one of the biggest motivations for them to learn EMI. The other related motivation was counted on the English learning environment as the interviewed students found their EMI class as the learning environment for their English speaking and discussion (33.3%) as S#17 confessed that

"Honestly, I found my EMI classes as one of the good learning environments for me to practice my English speaking and discussion so that my English can be improved much. Since we had to use English during most of the class time, we were required to use English to express our opinions, present the content knowledge, and discuss and debate among classmates. This made us challenging as well as motivated..."

Meanwhile, another motivation was reported as students' belief in gaining new learning experience in their undergraduate study (38.9%): "We have never learnt any EMI courses before so I was so curious about this course. I wanted to attend this course to see how it differed from VMI and experience the new learning style to achieve the new goal..." (S#9). Furthermore, 27.8% of the students confirmed their favor of learning the academic content in English and their fancy of choosing the EMI lecturers:

"At first, I really liked how my favorite lecturer taught us in some VMI courses in the second and third years. So, when I saw his name in registering for my Face detective technique course, I selected it immediately so that I could get the chance to continue being taught by him. When I realized it was an EMI course, I was quite surprised, but I still believed as I knew my favorite teacher was extremely good at English." (S#6)

However, about five out of 18 students admitted to having little or no enthusiasm to attend EMI classes because they were forced to or as they had few or no other options. These students revealed that they only wanted to complete this course as a compulsory subject in their university program. They shared their hesitation and worry in learning content knowledge in English with much more workload of preparation and studying before EMI lessons:

"To be honest, my friends and I were fear of learning our major in English languages, which meant we had to spend much more time on preparing our next lessons, such as searching the topic, reading and comprehending, translating the scripts or looking up the new technical terms. Even though we could only understand about 50-60% of that knowledge when we self-studied before the class" (S#2).

The consequences of this problem led to demotivation during their EMI learning. They expressed their ignorance in the benefits of EMI learning. They just wanted to pass this course only: "I just expected to pass the final exam of this course so that I could graduate from the university in time as I am currently tired of studying and I want to go for work as soon as possible..." (S#10). Meanwhile, despite their expectation of continuing English learning with EMI lessons, language competency also made their motivation more and more reduced as they confessed their deliberate attempt to comprehend the knowledge in English. S#17 admitted that

"I cannot understand most of what my EMI lecturer delivered. It is also hard for me to acquire academic knowledge or systemize what I have read. Therefore, my friends and I are rather fearful for preparation and readiness for EMI lessons. This made me quite less motivated and more stressed in my EMI learning..."

These findings are similar to those found in Le and Nguyen (2022), Vu and Burns (2014), Dang et al. (2013), and Le (2012) to some extent of students' positive perspectives of their EMI teachers and challenges on their learning characteristics even though the result of this finding revealed their compulsory register for EMI courses. This interesting finding showed the students' quite more positive perceptions than others.

Students' interactions in EMI classes

The next two questions interviewed the informants about their interactions with teachers and peers in their EMI classes.

On the question of teacher-student interaction in their EMI courses, the interviewees revealed supportive communication in general with their EMI teachers with practical assistance in explaining the content knowledge and technical terms. Specifically, most of the respondents expressed that *"as we cannot understand all of the content knowledge lectured in English so we usually ask our EMI lecturers to explain again and give more examples for us to clarify that kind of information, even after the lesson..."* (S#17). In addition, a new vocabulary was mentioned as one of the most question-raised issues between teacher and student interaction. It is disclosed that whenever the students were unable to understand any new words or technical terms in English, they would ask for clarification and explanation from their EMI lecturers. They also reported, *"My questions to my lecturers were mainly about the new vocabulary or any technical terms I cannot understand during the lessons. My lecturers then briefly explained and gave examples for me to more easily comprehend."* (S#18). Moreover, one of the most interesting findings is that investigated students seemed more interactive with their teachers on their EMI class group online tools (Zalo groups, Facebook groups) than face-to-face in their classrooms. They described that *"...we can ask any questions about our exercises, homework, and materials in our group so that our teacher will respond to us instantly. As we can text our messages, we can express our opinions or questions clearly so that our teachers can easily determine our problems and reply to us instantly."* (S#8). In short, the interactions between EMI teachers and students appear to be more often and responsive because they were together experiencing teaching and learning their academic knowledge in a foreign language, not in their L1 language as before. These verbal and written interactions between teachers and students may result in their enhancement not only in their content knowledge but also in their English language competence.

Meanwhile, in the case of the peer interactions among EMI students themselves, the most interesting and significant finding presented from data analysis was their L1 usage during their discussion time in EMI classes. Most of the interviewees (16 out of 18) reported that when they were asked to work in groups or pairs with their classmates, they often used their Vietnamese to discuss and explain their ideas. Later then, they presented their discussion in English in front of the class. *"When we participated in group discussion, we preferred and mainly discussed in*

our native language because we were not confident about our English speaking and we thought it would be time-saving to express our opinions to our friends. After that, we collected our ideas and tried to express in English for our group presentation..." (S#17). This resulted in little improvement in English competence during their peer interactions together with their EMI learning outcomes in terms of English instruction.

The interactions between students and their teachers and peers are crucial for fostering their academic interest and general enhancement of their English competence (Furrer et al., 2014). In summary, teacher-student and student-peer interactions in the current research are considered to be in line with previous studies to the extent of determining students' learning EMI positive experiences (Pianta et al., 2008; Patrick, Ryan & Kaplan, 2007). Even though the finding of benefits from classroom interactions in EMI classes is similar to that found in research by An, Macaro & Childs (2021), Sahan, Rose and Macaro (2021), Murray and Pianta (2007), and Pianta et al., (2008) to the extent of its pivotal and contributed aspects to content and language learning. However, the remarkable finding of an interaction between teachers and students is their virtual ebullient communication via online class groups before and after their lessons. This can be inferred that EMI lecturers appear to facilitate and support their students interactively after their lecturing time, which is a dearth in contrast to earlier findings.

Vocabulary shortage

As mentioned in the literature review, students' lack of vocabulary range was raised, and in-depth interviews from students' responses in their interviews, especially the amount of specified vocabulary in their majors. Five out of the informants shared that they lacked the vocabulary in their majors, so they hardly comprehended all the knowledge delivered by their EMI teachers, and it was so difficult for them to express their ideas and opinions in English. *"Our vocabulary comprehension is so weak and limited that we cannot understand all that my teachers lectured in English. It was only about 50% of the lesson that I can acquire..." (S#7).* The amount of understanding of their EMI lessons admitted by most of the investigated interviewees (12 out of 18) was only about 50-70%. This resulted in the problem of the vocabulary shortage raised by students' EMI learning. This caused their lessons more challenging as learners could only gain the main ideas from their lessons and spent much time guessing new words or using Google – an online tool for translation into their L1 language. However, there is still an interesting finding from students' perspectives that IT-majored students found it much more comfortable to learn English terms, *"... to some extent I found EMI is quite easier to understand than VMI as we can define the English technical terms exactly. We only got troubles in translating those terms into Vietnamese so we found EMI course is better than VMI for our major study..." (S#11).*

These findings are similar to Chang's (2010) about the crucial role of vocabulary in comprehending content knowledge. These are still in the same line with Keuk and Tith (2013) about students' problems in acquiring the EMI academic content despite the clear context of this current study. Moreover, the amount of EMI comprehension is only over half, so this can cause another challenge to their lecture content understanding. Therefore, it is highly recommended for adequate preparation of English language competence for EMI learning.

Academic content

Generally speaking, the investigated respondents hardly comprehended almost all the academic content delivered by lecturers or from textbooks. The challenge of understanding their content knowledge in EMI lectures unavoidably resulted from the lack of vocabulary range. Specifically, they had to encounter problems raised about their skills, expressions and knowledge acquisition.

Thematic analysis of informant responses showed that most interviewees could not completely understand their lessons in English. Most (about 67%) reported that they could only comprehend 50-70% of their EMI academic content. S#9 shared,

"it takes us longer to study and acquire EMI lessons than VMI ones because we must spend time code-switching what we heard in English into Vietnamese. Besides, we had to spend a lot of time preparing for our next lessons, such as looking up new vocabulary and searching more related information on the Internet. However, we still found it difficult to understand the exact meaning of academic content from our preparation...".

This finding revealed the challenges of content acquisition from students' EMI learning practice due to incomplete academic comprehension. This was similar to that found in Chang (2010) who reported that the percentage of students' EMI lesson comprehension was about 50 to 70%.

On the question of skill challenges during their EMI learning, the interviewees listed all the skills of reading, listening, speaking and writing as enormous obstacles to their EMI learning, especially listening and speaking skills. More than half of the informants (13 out of 18) expressed their difficulties in listening comprehension during their EMI lessons.

"It was so hard and stressful for me to keep listening all the English content because my listening skill is not good. I cannot understand all the words I listen. I cannot have time to take notes while listening to the lecture. I usually had to skip note-taking. I think I can comprehend about 50% of the lectures, which made me feel under pressure to study and search for more understanding after the lesson...", said S#10.

Meanwhile, other EMI students talked about their impediments of speaking skills and expressing their opinions in front of the class.

"I myself found it much more challenging to conquer my hesitation and shyness to share my opinions or ideas in front of my classmates in English. I did not find myself confident in speaking English. I was very nervous and worried that my teacher and friends could not understand what I said...", reported S#11.

In summary, these findings were in line with Bielenberg (2004) to the extent of content understanding challenges due to limited vocabulary. Moreover, the reason in this study was more specifically delved into technical term acquisition and skill competence because of their academic subject features. This finding differs from Pun and Jin (2021) to a certain extent of grammar and subject features while sharing the same points of lexical words and expressing opinions in EMI lessons.

EMI lecturers' pedagogies

As EMI lecturers' teaching methods were pointed out in the previous studies, it is indispensably questioned and evaluated in this study. Surprisingly, the interview analysis showed that respondents completely trusted in their EMI lecturers' language competencies and pedagogies. Most informants (14 out of 18) showed their positive perspectives that their EMI lecturers had good and very good English proficiency, especially good pronunciation, good speaking skills, and clear accents to understand.

"My EMI lecturers acquire great English language proficiency and academic knowledge. They can lecture and explain all the aspects of our major content in clear and easy-to-understand ways. Some of them have much experience lecturing and presenting the content knowledge in English. We admire our EMI lecturers much..." (S#7).

Additionally, the interview results showed that most of the students (16 out of 18) expressed their admiration and respect for their lecturers' lecturing and sharing, besides their excellent pronunciation and speaking of English.

"My EMI lecturer has taught me in another VMI before this course. I admired him very much as he usually gave us advice about our major study and English learning. He often recommended some materials in English for us even while we were learning VMI. He often suggested that we should improve our English ability for future jobs." (S#15).

With regard to their teaching methods, about one third of the interviewees reported that their lecture delivery was quite fast to catch up with, but they felt acceptable when their teachers spent 10-20% of the lecture explaining in Vietnamese for deeper and clearer understanding. Moreover, it can be noted that even with adequate English and pedagogical ability of the EMI lecturers, EMI students would love their teachers to give lectures with more exciting and interactive activities than reading materials and presenting ones so that they can eagerly participate in the class activities. Student #13 said,

"It was so stressful for us to read many kinds of English materials and present our comprehension in front of the class also in English. This is quite different from what we learn in an English class. I do hope that we can participate in more activities, such as games, to activate our prior knowledge and use for academic content..."

From the students' positive perspectives and experience to content lecturers' English ability and pedagogy, the finding was contrary to Goodman's (2014) arguments that were adopting EMI has become a real challenge as it is really difficult to find academic staff who are both proficient in English language skills and in content knowledge. The finding was similar to Thompson and McKinley (2018) in terms of the way EMI lecturers delivered their lessons solely. This result can explain more about the reasons for choosing EMI courses as interest in lecturer's teaching methods as mentioned before. As a result, EMI lecturers can consider a translanguaging, code-switching approach for their EMI teaching context (Nguyen, 2022).

Conclusion

This study explored the students' perspectives and challenges on EMI courses at a technical university in Vietnam. Qualitative research of 18 in-depth interviews was used to explore the students' perceptions and challenges in learning EMI courses. The results from this study are consistent with previous studies in the literature on EMI in different contexts in terms of exploring students' positive perspectives on EMI courses and some challenges, including (i) their positive experience in interactions in EMI classes, (ii) students' problems in acquiring academic vocabulary, (iii) incomplete academic content comprehension, and (iv) teachers' quite good language proficiency and pedagogies. Nonetheless, this study showed the differences in confirming the benefits of virtual interactions within online class groups before and after the EMI lessons among teachers and students. This research also revealed the specific reasons for incomplete academic content comprehension for technical term acquisition and major features.

From the findings and discussion, the study suggests several recommendations for students' readiness and practice in learning EMI courses at the higher education level. Content and language teachers should develop more self-study skills and close collaboration to exchange language and pedagogy. In addition, they can prepare some activities for warm-ups or games to revise and activate students' knowledge and vocabulary so that they can be more confident in their EMI lessons. Meanwhile, EMI lecturers should "localize" these academic contents by adding examples related to Vietnamese things so that students can easily imagine and understand the meaning. In the class, important knowledge should be highlighted so that students can understand which information they should write down in their notebooks. Moreover, EMI lecturers should focus on helping students to improve their writing and note-taking in English.

For students, they should prepare well for their English language proficiency before enrolling in the EMI courses and generate motivation for EMI courses because of EMI benefits. Specifically, it is better for them to enhance their listening and speaking skills, for instance, their pronunciation, presentation skills, and expressing opinions in English. Moreover, they should spend much more time not only on acquiring technical vocabulary but also on their academic content besides self-preparing their writing skills and note-taking skills in English so that they can keep up with the EMI courses.

However, this study still remains some limitations for further studies. Firstly, the scale of the research was small, further studies on EMI lecturers' views and experience can be conducted. In addition, further research should be carried out using quantitative methods so that the data size can be more sufficient and larger, or mixed methods can be used to triangulate the results through statistical analysis. Moreover, the research can be expanded in some universities that implement EMI programs for more general results and discussion.

In summary, this study revealed distinctive findings in aspects of virtual teachers' and students' interactions, students' absolute beliefs in EMI teachers' language proficiency and pedagogies, and their challenges and rationale of majored subject features besides some similar aspects of previous studies. Moreover, this study also suggests some key insightful considerations for better implementing EMI courses from teachers' and students' views, which can be helpful and

essential for upcoming EMI program implementation. All of these suggestions can play a certain part in improving the EMI programs in the range of higher education systems in Vietnam and the world. In terms of academic research, further studies can be conducted to investigate EMI teachers' experiences, EMI teachers' challenges on teaching EMI, or EMI policies among institutions.

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The research of implementing the computer-supported collaborative learning environment with Google Slides

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ABSTRACT

The purpose of his study is to use Google Slides in the collaborative editing software to explore whether it is helpful to implement collaborative learning in teaching college students. This study applied a quantitative research method; 200 undergraduate students who are Chinese majors at Hanoi Pedagogical University 2 will randomly select as participants. After developing the CSCL environment, in which classroom experiments were conducted, the scale was developed to investigate and use SPSS to analyze various possible influences on learning motivation. In addition to collecting and analyzing quantitative data, research, and discussion were carried out by observing the reactions and performance of students in class. Through literature research, investigate various independent variables that may affect learning motivation. This research analyzed with non-numerical statistical methods to explore learning achievement, learning anxiety, and learning attitude, and discuss whether independent variables such as self-efficacy will have an impact on learning motivation to evaluate the feasibility of Google Presentation as computer-assisted collaborative learning. The findings from the quantitative analysis show that students are highly motivated to use Google Slides to implement computer-assisted collaborative learning and are not affected by learning achievement, learning anxiety, learning attitude, and self-efficacy in discussions.

Keywords: Google Slides, CSCL, Collaborative Learning

Introduction

The learning community concept is a concept of education that Dr. Manabu Sato proposed in 2012. These educational concepts have influenced the world and set off a learning revolution in which the importance of "collaborative learning" is emphasized. The researcher believes that future teachers need to adapt to the current educational trend and use computer-assisted collaborative learning to establish a teaching environment for students to develop their learning

literacy.

Until today, a wide variety of collaborative application platforms are provided for free, and they are very easy to obtain. If information technology is easy to use and valuable, it will increase the willingness of teachers and students to continue using it. Teachers are the key to deciding whether the teaching site is willing to choose these collaborative application platforms to integrate information into teaching (Liu, Y., Fan, T., Chen, T., Xu, Q., & Yang, Q., 2021),

This research refers to the past literature and found that although the related research of computer-assisted collaborative learning (CSCL) has been developed for many years, based on the observation of researchers in the teaching field for many years, the current teachers are generally due to insufficient information ability, old hardware equipment, and classrooms. (Fan, Q., Fan, D. P., Fu, H., Tang, C. K., Shao, L., & Tai, Y. W., 2021). The performance of the internal wireless network AP is too old to support the need for multiple people to surf the Internet simultaneously and coupled with the time pressure of teaching progress and other factors, and there are still many universities in Asia countries, including Vietnam, that have to implement computer-assisted collaborative learning classrooms at the university teaching site. (Ansari, J. A. N., & Khan, N. A., 2020).

Although the integration of information technology into learning was advocated and encouraged in the past, the general university teachers' learning-centered integration of information technology into teaching is still insufficient. They lack the motivation to learn related knowledge and actively promote curriculum innovation. Education should guide students to become independent in the application of information technology.

Adaptability and active learning cultivate the resources, opportunities, and ability to construct knowledge for a long time. Researchers chose Google Presentation as a research tool because, based upon the previous research, have been found that PPT presentation is a kind of application software that teachers are more familiar with because we often use it as a tool for teaching or reporting, so there is less rejection and fear in the attitude of use. Students will also have many opportunities to use briefings in the future, from universities to graduate schools, and even to work outside of society (Stahl, G., Koschmann, T., & Suthers, D.D., 2006). In addition to displaying personal works, Google Presentations also have a built-in design for interactive discussions and collaborative learning with others. Therefore, Google presentations are used as a tool for computer-assisted collaborative learning.

Literature review

Apply Google Slides as a research platform.

Google Slides is one of the Google Docs Editor suite apps provided by Google LLC. Google Presentation is easy to learn and use. The interface is similar to the familiar PowerPoint. The most significant feature is that it has online sharing editing, real-time annotation, and questioning functions, and it can be used on various platforms. However, it is recommended to use the Chrome browser or download the free Google Newsletter APP to use it. There are no hardware platform restrictions when using it. Students can choose to directly interact, discuss

and collaborate with any online classmates online without being restricted by space and time. Researchers have used Google presentations on commonly used computer operating systems, such as Windows 10, Mac, Chrome OS, and mobile operating systems, such as Android, iOS, Etc., and they can be used typically without any problems. It is a cross-platform application software used has the advantage that it can continue to use any new hardware purchased by the school in the future without restriction (Gao Shuzhen, 2012).

Wu Jian-Yi (2013) uses Google Cloud services to design a cooperative network learning study-taking elementary school social field learning as an example. The research participants and curriculum strategies adopted cooperative learning, but the method did not clearly describe using cloud tools in teaching. Therefore, the research participants and goals of this study differ from this study. To sum up, it encourages researchers to explore the possibility of Google Bulletin's teaching application and provides a reference for future researchers or on-site teachers. Provide teachers or students with one more choice and reference through the application of universal and unrestricted use, and also has an interactive communication function, Google briefing on implementing a kind of research literature of elementary school teaching site implementation information into teaching. The innovation of this research lies in the application of quick access to use, quick collection of student works, real-time display, real-time interactive discussion, and collaboration. According to previous studies, it is simple and easy to use and can meet the needs of specific teaching purposes at the teaching site. This research uses Google presentations as a tool for computer-assisted collaborative learning to explore the problems and solutions encountered in the process of implementation and uses self-compiled scales to analyze independent variables that may affect learning motivation; finally, supplemented by teaching Observation records are used to evaluate the feasibility of the results of this study.

Computer Support Collaborative Learning and Learning Motivation

Computer Support Collaborative Learning is a method of combining information technology with collaborative learning. Learning is carried out on the Internet or in an electronic classroom. CSCL can support students to study together, conduct discussions or exchange information through the Internet, and access content together (Tran, L. A., Tran, T. D., Nguyen, M. H., & Nguyen, M. N., 2023). Teachers and peers can also give feedback online at the same time. The earliest computer-supported collaborative learning (CSCL) concept appeared in a seminar in San Diego, USA, in 1989, so it has been developed for 30 years. However, it is also found in the literature: "Although future education can be assisted by cross-platform collaborative learning, CSCL has not yet had a significant impact on school education around the world. Stahl, G., Koschmann, T., & Suthers, D.D (2006) found that teachers and education authorities usually do not understand the social basis of learning and how Effective collaborative learning is carried out through classroom teaching, book learning, the Internet, and individuals to form a mutually supportive and flexible learning environment; therefore, it takes many years for teachers to create collaborative classrooms, and the development of effective groups can be carried out. Interactive courses require many iterative trials and redesigns.

In teaching activities, CSCL activities are challenging to evaluate its efficiency and effectiveness; early efforts focused on the potentially harmful effects of computer-mediated

communication but ignored the potential benefits of computer-mediated communication. Many researchers, such as Santoni, M. J., Kashyap, R., Camoin, L., & Borg, J. P. (2020), used the Group Scribbles (GS) version 2.0 software jointly developed with SRI International and Singapore NIE to support learning activities, confirming that "CSCL learning is more effective for students than traditional methods, and can improve students Confidence in mathematics". Chang, Y. H., Yan, Y. C., & Lu, Y. T. (2022) found in the collaborative teaching action research in the fields of social learning, art and humanities, and reading classes that teachers found the following dilemmas in the process of traditional collaborative learning; first, there are not many professional books in the library. Second, the number of computers in the library is too small, and the speed is slow. Third, when students coordinate and divide labor into groups, teachers often need to intervene to resolve disputes. Fourth, the time for making posters is not enough to diversify time from other courses for use.

The definition of learning motivation refers to the learning process, and it triggers learners to spontaneously devote themselves to learning activities and the thinking process and maintain the motivation of learning. The related learning motivation theories are divided into cognitive learning motivation theory and behaviorism. According to the theory of learning motivation, social learning-oriented learning motivation, and humanistic learning motivation theory, students must have an attitude of autonomous learning in order to be competitive in the future. Therefore, if teachers can stimulate students' learning motivation, it will be great for students' Help. Three theories that affect learning motivation include 1. Bandura's self-efficacy theory (self-efficacy), 2. Anxiety theory, 3. Pintrich's motivation theory (Ye Bing Yan, 2013)". In summary, this study will discuss five independent variables, including self-efficacy, computer typing efficiency, learning anxiety, learning attitude, and learning achievement, into the discussion that affects learning motivation.

Learning effectiveness

Learning attitude and high learning motivation are very helpful to students' learning and can effectively improve students' learning effectiveness (Chang, 2010; Norris, 2011). "The indicator of learning effectiveness can be a certain change in the learner's behavior, which is then identified by subjective consciousness. Learning effectiveness can be measured by many indicators, including learning satisfaction, performance, self-evaluation, learning achievement, classroom Evaluation, participation level, self-efficacy, learning interest and learning experience, etc. (Wang Ruizhi, Liao Ling Zhu, 2008). The evaluation of learning effectiveness itself is diverse and complex and cannot be determined by achievement tests alone" (Yang Yu Lin, 2006). According to the research above, this research uses an understanding of students' learning motivation and teaching observations as a way to evaluate learning effectiveness instead of using quasi-experimental research conducted by most past researchers based on differences in learning achievement.

Zhaojie, Y. (2014) once pointed out that students' learning effectiveness can show difficulties in improving students' learning effectiveness in a short period of time. Manabu Sato (2012) emphasized that implementing a learning community in a short time can increase students' willingness to learn; however, student learning effectiveness requires long-term observation. Huang Shu Ling (2013) pointed out that the way to evaluate the effectiveness of learning can

be through long-term collection and observation of the learning process of students, rather than testing the depth of knowledge and memory strength of students at a certain point in time. Students can exchange opinions or discuss with others. Have a high willingness to learn to communicate and solve problems.

The ARCS motivation theory

In the academic field, learning motivation is defined as a student's desire to invest in the learning environment (Keller & Litchfield, 2002). The influence of learning motivation on student learning effectiveness has been mentioned in many kinds of literature. It is believed to stimulate students to learn independently and perform well in learning achievement (Zimmerman, Bandura, & Martinez-Pons, 1992). Pintrich (1999) also believes that learning motivation is an important factor in improving learning effectiveness; on the contrary, a lack of learning motivation will become a hindrance to students' learning (Carson, C. H., 2006). Many works of literature in the past have confirmed that learning motivation is absolutely correlated with learning effectiveness. The ARCS motivation model proposed by Keller (1983) is evaluated with the following four elements: Attention, Relevance, Confidence, and Satisfaction. It emphasizes that the motivation of the learner must be matched with these four elements. The use of elements can achieve the effect of motivating students to learn. Therefore, this research mainly focuses on whether the use of Google presentations to assist collaborative learning can promote students' learning motivation. The ARCS motivation theory is used to compile a learning motivation scale to study whether the use of Google presentations can achieve significant differences in students' learning motivations.

The learning motivation of digital learning has a positive and significant impact on learning effectiveness (Zeng Miaoyin et al., 2011). Highly motivated students have better learning results. Students have a strong learning motivation for digital learning and can improve their learning performance (Gao Shuzhen, 2012; Chen Shunwen, Wei Jiaying, 2013). It is recommended that school administrators and teachers should pay attention to students' learning motivation, make students feel that using digital learning is valuable, and actively increase students' expectations and emotional motivation for digital learning. For the initial use of digital learning systems, teachers can increase students' motivation (Teik, O. C., 2016). Self-confidence encourages students to try to use digital learning systems and use digital learning systems in class so that students will gradually develop confidence in themselves, have more precise goals, and have a strong desire to learn the course content and have a better outcome. With high expectations and good self-efficacy, students with positive learning motivations can generate a strong will and motivation to use digital learning and use digital learning platforms to further enhance students' digital learning effectiveness (Li Yong Hui, 2017)."

Research Questions

This study completed the establishment of a computer-aided collaborative learning environment using Google presentations through implementation and improvement; and used questionnaire analysis to explore whether Google presentations are suitable for college students. After the integration interface of this study, the Google presentation can facilitate teachers to monitor students' learning process in real-time; it could also integrate the creation of the whole class in

real time, which is convenient for teachers to implement the function of synchronous discussion in the whole class. Teachers can also use the annotation function to give individual guidance to students in real-time. This study hopes to explore whether the way of using computer-assisted collaborative learning in the teaching field can realize a collaborative learning environment of "autonomous action", "communication and interaction," and "social participation". Based upon the above, there are four have been conducted as follows:

- (1) Why do undergraduate students have a good acceptance of the learning motivation of using Google Presentations?
- (2) How is the learning motivation of undergraduate students applying Google Presentations affected by their learning attitudes?
- (3) Why is the learning motivation of undergraduate students using Google Presentations affected by the discussion of self-efficacy?
- (4) How is the learning motivation of undergraduate students who use Google Presentations affected by their learning achievements?

Methods

This study applied a quantitative research method; 200 undergraduate students who are Chinese majors in Hanoi Pedagogical University 2 will randomly be selected as participants. After developing the CSCL environment, the researchers conducted classroom experiments, then developed the scale to investigate and used SPSS to analyze various possible influences on learning motivation. In addition to the collection and analysis of quantitative data, research, and discussion are carried out by observing the reactions and performance of students in class. The independent interference variable has a significant impact. Through literature research, investigate various independent variables that may affect learning motivation, and then analyze with non-numerical statistical methods to explore learning achievement, learning anxiety, learning attitude, and discuss whether independent variables such as self-efficacy will have an impact on learning motivation to evaluate the feasibility of Google Presentation as computer-assisted collaborative learning.

The learning motivation scale of this research is based on Keller (J. Keller, 1983) ARCS (A attention, R correlation, C self-confidence, S satisfaction) learning motivation model theory and refers to Kuo, Y. (2013). The scale was revised to be used as a scale for measuring learning motivation after using Google presentations, so it has content validity. In order to better confirm whether the scale has constructed validity, the reliability analysis of each aspect is carried out, and the results are as follows: This questionnaire has 17 questions in four dimensions, namely A (attention) and R (relevant), C (confidence), S (satisfaction), the reliability analysis of the four dimensions which showed the individual reliability analysis of the four dimensions of the Learning Motivation Scale. Among them, the Cronbach's Alpha values of A (attention) and R (correlation) are 0.877 and 0.755, respectively, which are both greater than 0.7; the Cronbach's Alpha values of C (confidence) and S (satisfaction) are 0.689 and 0.601, respectively, which are both greater than 0.6; ARCS total the results of the overall reliability analysis of the

questionnaire have good construct reliability.

Results/Findings and discussion

This study found in the literature that learning anxiety, learning attitude, willingness to use in the future, learning self-efficacy, learning achievement, and other variables may be related to learning motivation. Therefore, use correlation analysis to explore the relationship between various variables and whether the correlation is significant. The results showed that learning anxiety is significantly related to future use intention. The Pearson correlation coefficient is .852, $P < .001$; learning attitude is significantly related to collaborative learning self-efficacy, Pearson correlation coefficient = .843, $P < .001$; others are not significant. The learning motivation after using CSCL is not significantly related to learning anxiety, learning attitude, future willingness, discussion of self-efficacy, and learning achievement.

Significantly affect learning motivation. The Kruskal Wallis test method has been used to analyze the learning motivation of ARCS in terms of learning anxiety, learning attitude, discussion self-efficacy, typing efficiency, learning achievement, Etc. The results showed that learning anxiety, learning attitude, discussion self-efficacy, and learning achievement were ineffective. Researchers, through the result, had found that there may be the following reasons: first. Students feel that the ability to use computers to learn a second language is a fine thing, so they have a strong motivation to learn, and they dilute learning achievement and learning anxiety; learning attitude, discuss the possible negative influence of self-efficacy. Second, to learn Chinese well, students take the initiative to solve problems through collaborative learning, so they will not be disturbed by learning achievement, learning anxiety, learning attitude, and discussion self-efficacy to affect their learning motivation. Third, due to research restrictions, there are only 200 students participating in the research. Few research samples may cause the statistical analysis results to be difficult to be significant.

Table 1. Descriptive statistics

	mean	SD	N
Learning motivation	4.085	.853	200
Learning anxiety	1.794	1.155	200
Learning attitude	3.384	1.251	200
Willingness to use in the future, learning	2.125	1.208	200
Self-efficacy	3.490	1.084	200
Learning achievement	78.961	11.361	200

Table 2. Correlation analysis Chart

		learning motivation	learning anxiety	Learnin g attitude	Learning attitude, willingness to use in the future, learning	self- efficac y	Learnin g achiev ement
Learning motivation	Pearson correlation coefficient	1	-.281	-.006	-.353	.237	.075
			.164	.978	.077	.243	.716
		26	26	26	26	26	26
Learning anxiety	Pearson correlation coefficient	-.281	1	.269	.852**	.187	-.148
		.164		.184	.000	.360	.471
		26	26	26	26	26	26
Learning attitude	Pearson correlation coefficient	-.006	.269	1	.202	.843**	-.244
		.978	.184		.323	.000	.229
		26	26	26	26	26	26
Willingness to use in the future, learning	Pearson correlation coefficient	-.353	.852**	.202	1	.110	-.091
		.077	.000	.323		.594	.660
		26	26	26	26	26	26
Self- efficacy	Pearson correlation coefficient	.237	.187	.843**	.110	1	-.092
		.243	.360	.000	.594		.654
		26	26	26	26	26	26
Learning achievemen t	Pearson correlation coefficient	.075	-.148	-.244	-.091	-.092	1
		.716	.471	.229	.660	.654	
		26	26	26	26	26	26

** . P <0.01

The results of the quantitative analysis showed that students were motivated to use Google Slides to implement computer-assisted collaborative learning, and they will not be affected by learning achievement, learning anxiety, learning attitude, and discussion self-efficacy. Both Ou

Yongsheng (2014) and Zhaojie, Y. (2014) mentioned in their research that many people confuse cooperative learning with the collaborative learning proposed in the "learning community" advocated by Professor Sato Gaku in Japan. But the two are different; collaborative learning can make up for the lack of cooperative learning. Collaborative learning emphasizes the relationship of "mutual learning" rather than the relationship of "mutual teaching". The "reciprocal relationship" is that students who have not yet learned take the initiative to ask students who have learned it. Through mutual discussion and mutual assistance, they are equal to each other. The "reciprocal relation" (reciprocal relation) benefits everyone. Therefore, Google Presentations can be implemented as an information integration tool for classroom teaching. Teachers can create a computer-assisted collaborative learning environment through Google slides, and students will also produce collaborative learning behaviors (Spillover Effect). For example, first, Students will encounter some operations in the process of making slides. School children will take the initiative to ask questions, and some will also actively assist. Second, although classroom discussion and interaction performance is not as expected, students like to ask questions through the Internet and respond to their classmates on the Internet. Third, some students would like to use Google slides to organize the knowledge they have learned outside of the classroom and are willing to interact and share with their classmates and get the support of some parents.

In terms of learning effectiveness, due to research limitations, this study failed to prove whether using Google Slides to implement computer-assisted collaborative learning can improve the discussion self-efficacy of school children. Researchers observed students' learning behavior in the classroom and found that it is impossible to use Google Presentations to improve learning effectiveness in a short period. Good discussion performance. The research results of Yan Yong Sen, Hu Xue Cheng, and Ke Tian Sheng (2011) found that learners' attention has a significant positive correlation with learning effectiveness, and the interactivity of digital textbooks interferes with the relationship between attention and learning effectiveness." The results of this research were also found through classroom observations. In order to solve the computer operation problems, the student union focuses on the operation of solving computer problems, which delays the main discussion activities, thus affecting the effectiveness of learning.

Based upon previous studies showed that there are many variables that affect learning effectiveness. Therefore, using Google Slides to implement a computer-assisted collaborative learning environment, it is difficult to prove whether the learning effectiveness can be significantly improved in the short term. However, it is recommended that teachers not only pay attention to the learning effectiveness of school children in terms of learning achievement, whether there will be obvious effects in the short term but also pay more attention to the spillover effects brought by the computer-assisted collaborative learning environment. The diversified learning environment provided by teachers will promote the learning motivation of schoolchildren. Schoolchildren can experience unprecedented learning methods, which will be very helpful to schoolchildren's future learning.

Conclusion

The results of this study showed that the self-efficacy of schoolchildren's discussion in class is significantly related to the learning attitude of Mandarin. The students with high self-efficacy have higher learning attitudes than those with low learning efficiency. Therefore, it is recommended that in curriculum design, teachers should first teach students the skills of discussion effectiveness, and when the ability matures, use Google slides as a tool for computer-assisted collaborative learning. It is necessary to focus on curriculum design, supplemented by the integration of information into teaching. Teachers use Google Slides to implement the integration of information into teaching. Students can improve their information skills in the process, get opportunities for typing practice, and create a collaborative learning environment for students to learn actively. However, in the process of using Google Slides, it is inevitable that you will encounter some hardware and software difficulties and troubles. In teaching, teachers should adopt a gradual approach to allow students to gradually get in touch with and adapt to the use of computers so as to avoid learning anxiety.

This study has been implemented in language teaching and found that Google Slides is suitable for computer-assisted collaborative learning. The advantage is that it is easy to learn and use. It is recommended that teachers can also apply Google slides in the teaching of nature courses in the future, especially suitable for teaching activities that require students to collect information online and share and interact with each other in the course.

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Utilizing Microsoft Sway to Make Interactive Presentations for Language Students in a Public Asian-Pacific University

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ABSTRACT

This research focused on teachers' and students' feedback on the application of Microsoft Sway in creating interactive presentations in an English-speaking Country Study course at a public university in Vietnam. Forty-five third-year English-major students were divided into five groups and required to create online presentations on different aspects of life in English-speaking countries, using specific templates in Microsoft Sway and incorporating various online and offline multimedia sources. The study was conducted through focus-group discussions with students and semi-structured interviews with teachers. Results showed positive feedback from students on improving their academic performance and language skills, citing benefits such as saving time with the tool's effortless design and easy access to a variety of useful reference sources. Teachers' interviews revealed improvement in students' reading, writing, and critical thinking skills during the process of creating content for the interactive presentations. However, students encountered difficulties searching, filtering relevant information on the web, and creating outlines for presentations. The study has practical implications for teachers and researchers looking to apply new online learning and teaching tools in similar educational contexts.

Keywords: language education, Microsoft Sway, interactive presentation, media-based tool

Introduction

The development of Information and Communications technology (ICT) has changed most aspects of life, and its application in higher education was inevitable. In some Western countries such as Australia, the United States, and the United Kingdom, national and state policies reflect the belief that "learners using ICT will reap benefits to their learning, and that learners need ICT skills to be employed in the future high-tech workplace" (Jordan, 2011, p.16).

In Vietnam, English and ICT are highly valued as two of the most important instruments in industrialization and modernization. ICT is seen as the means to support innovative teaching and learning in Vietnam and is often seen "as a way to merge into a globalizing world" (Peeraer, & Van Petegem, 2011, p.238). However, teachers and students have faced numerous difficulties

in finding appropriate tools to support their language teaching and learning. In particular, the design of digital learning materials such as videos, presentations, newsletters, infographics, and so on is the barrier that hinders students' study. Microsoft Sway, part of Microsoft Office, designed for creating presentations and documentation, has been used as a supporting tool for language education. Nevertheless, despite the multiple uses of Sway in education, research regarding its usage in language learning and its benefits and drawbacks is limited. This paper aims to study the benefits and drawbacks of applying Sway in making interactive presentations in an English-speaking course for third-year English-majored students at a public university in Vietnam.

This paper contributes significantly to the gap in the literature on implementing Sway in language classrooms in Vietnam by examining students' feedback on making presentations using Sway. Findings from this paper are beneficial not only for teachers but also for researchers in similar educational contexts.

Literature review

The introduction of ICT has brought about tremendous changes in different aspects of life, especially education. Thanks to ICT, new ways of teaching and learning have been formed to meet the demands of globalization.

UNESCO (2009) has defined ICT as

"a diverse set of technological tools and resources used to transmit, store, create, share or exchange information. These technological tools and resources include computers, the Internet (websites, blogs and emails), live broadcasting technologies (radio, television and webcasting), recorded broadcasting technologies (podcasting, audio and video players, and storage devices) and telephony (fixed or mobile, satellite, visio/video-conferencing, etc.)."

In the field of language teaching and learning, ICT can be divided into two types, namely non-web-based and web-based learning tools. Whereas the former includes tools such as radio, television, films, and language lab, the latter covers online technologies such as YouTube, email, blogs, Skype, mobile phones, and iPods (Alkamel & Chouthaiwale, 2018). Nowadays, web-based learning is one of the fastest-growing fields, also known as technology-based learning, online education, or e-learning. It offers chances to develop e-learning environments that are well-designed, affordable, learner-centered, interactive, and flexible. This leads to the fact that lecturers need to be more technologically professional in this modern day (Ly et al., 2021; Andrew, 2022). By incorporating the use of ICT in learning activities, lecturers in the twenty-first century are no longer just ones who transmit knowledge but are also creating democratic and challenging learning conditions for students. Digital-based media and learning resources can be a solution to produce superior learning outcomes and engagement for students than conventional instructions (Wihartanti & Wibawa, 2017; Esparrago-Kalidas et al., 2022; Truong et al., 2022). Thus, lecturers can employ learning media based on technology as alternatives to traditional teaching methods.

Currently, there are a number of web-based media which can be effectively implemented in language education. One of them is e-learning Microsoft Sway. It is one of the platforms developed by Microsoft that can be used in making instructional media designs. Sway can be used to create engaging content and presentations without the requirement for a presenter (Hutchinson, 2020). As opposed to creating the typical Word document with photographs, it

allows students to display and demonstrate their digital literacy skills. Moreover, Sway can create newsletters and "how-to" guides that benefit lecturers and students. Additionally, it produces online presentations that could encourage students to quit more conventional formats such as Microsoft PowerPoint (Usman & Baihaqi, 2020). According to Huda (2017), Sway may be used to create products that blend texts, voices, videos, and images when the presentation is displayed. In light of this context, Sway is a tool that can be utilized in the creation of learning materials and as an alternative to online learning.

In comparison to other presentation apps, Sway App has the following advantages:

(a) Its excellent feature design makes it simple for users to upload a variety of content, including YouTube videos, photos, tweets, and other multimedia content (Istiqomah, 2016). This free app aids in gathering, organizing, and sharing our thoughts, accounts, and presentations on a more interesting web-based interactive screen. Sway is ideal for lecturers and students who will generate reports, resumes, and presentations or make course materials more enjoyable (Sudarmoyo, 2018).

(b) Users can input a variety of media in the form of photos from websites of free image suppliers such as Flickr, Bing, and Pickit. Also, users can include useful educational videos downloaded from YouTube, their own computer devices, or Cloud App (Wihartanti & Wibawa, 2017).

(c) Sway-based online learning resources can be accessible to students through cell phones, tablets, or computers. As a result, learning is not constrained by time or space. Lecturers who want to create their own online learning materials quickly and easily may find a solution in the simplicity of developing Sway-based materials (Wihartanti & Wibawa, 2017). Noticeably, Sway App will automatically reformat a presentation slide when the presenter views it on a smartphone, laptop, or computer (Istiqomah, 2016).

(d) Sway App makes it easier for students to collaborate with one another to create Sway projects (Istiqomah, 2016). Every group member can contribute to the presentation's content by editing Sway slides as long as they are allowed to access them. This is an outstanding feature that helps students work with their groups better. It is also very convenient for group members when they can access Sway projects at any time, anywhere, and with any device.

(e) Presentations created with Sway can be shared or embedded on websites and are automatically backed up to the cloud. Therefore, worrying about losing data is unnecessary (Sudarmoyo, 2018).

Research Questions

The study sought answers to the following research questions in order to achieve its objectives:

1. What are the benefits of using Sway as an online learning tool in terms of academic performance, language skills & IT skills?
2. What difficulties do the students and teachers encounter during the application of Sway as an online learning tool?
3. What do teachers and students suggest to maximize the efficiency of using Sway as an online learning tool?

Methods

Pedagogical Setting & Participants

As mentioned previously, this study focused on investigating the teachers' and students' feedback on the application of Microsoft Sway in making interactive presentations in a content course at a public university in Vietnam. Microsoft Sway has been applied as a digital-based media for students to make interactive presentations in a course where students are required to work in groups to search for information about one of the selected aspects of country life they study, such as geography and political life, and culture. After that, they designed an online presentation summarizing the information they collected using Microsoft Sway. Then, the final product link will be shared with the lecturer and the other classmates to read and do the follow-up exercises. This is considered an assignment of the course that students must complete online outside the class.

Therefore, data were collected from all teachers of English and third-year English-major students who were in the researchers' faculty and had been involved in utilizing the Microsoft Sway in the course of English-speaking Country Studies during the academic school year of 2021-2022. There were seven classes in the course, ranging from 22 to 30 students per class. For purposive sampling, the researchers invited all five teachers who had taught seven classes of the course and students who had taken the course and were willing to be involved in this study. The researchers sent emails to all teachers to invite them to participate in the study and make individual arrangements accordingly. For student participants, the researchers went to each class and met them directly after their class hours to explain the purpose of this study, then invited six to eight students from each class to join the focus group discussions. Totally all five personal interview participants and 45 focus-group discussion participants (divided into 7 groups) participated in this research. All the seven focus-group discussions with students and five individual interviews with teachers were carried out in July, 2022, one month after the course completion.

Design of the Study

The study employed a qualitative method through focus-group discussions with students and semi-structured interviews with teachers.

Focus-group discussions: The discussions were based on 14 detailed questions which can be classified into four different sections. The first four questions in section one aim to explore whether students have ever used Sway before, how they used this online tool in the course of English-speaking country studies, and whether they like its application or not. The next three questions in section two focus on how students evaluate the impact of applying Microsoft Sway on their learning in terms of academic performance, language skills, and IT skills. Section three, including four questions, mainly clarifies the difficulties the students may face during the application of Sway. Then the three last questions in section four are expected to elicit students' suggestions for maximizing the efficiency of using Sway as an online learning tool in this course as well as other courses in the next semesters.

Semi-structured interviews: The personal semi-structured interviews with all five subject teachers were guided by 15 specific questions, which can be divided into four main sections, and they are generally similar to four sections of the student focus-group discussions. The first section, including five questions, aims at acquiring some information about teachers' experience in teaching the subject, the number of students in each class, the mode of subject teaching,

either online or offline, how the online tool was used, and whether the teachers like its application in the course or not. The second section, with three next questions, centers around the impacts of the Sway application in terms of students' academic performance, language skills, and information technology skills. The third section consisting of four questions, focuses on exploring the challenges that both students and teachers faced during the application of the tool. The last section comprising three last questions uncovers the individual teachers' suggestions for better the application of Sway as an online learning & teaching tool in the upcoming years.

Data collection procedures

The data collection started with student focus group discussions. Seven focus group discussions among 45 students were conducted as part of this study, including four groups of six and three groups of seven. They were all third-year English-majored students and took part in the course of English-speaking country studies at a public university in Hanoi, Vietnam. They all participated in the course for the first time and were willing to join the discussion of this study. All the focus group discussions lasted 45-60 minutes and were conducted in students' classrooms after their studying hours. For better understanding and sharing, all the discussions were carried out in Vietnamese, the mother tongue of both the researchers and participants. One researcher participated in and facilitated the discussion among integrated students as a moderator in each focus group discussion. Thanks to the permission from the participants, all discussions were recorded in a digital audio recorder and responses and comments of the participants were also written down by the researchers while unfolding the focus group discussions.

The focus group discussion data collection process was then followed by personal semi-structured interviews with all five subject teachers. They were all English lecturers and were involved in teaching the course from one to three years. Each interview lasted from 45 to 60 minutes, in which four interviews were conducted at the participants' offices during office hours. Only one interview was conducted online in the evening via Zoom because this participant, who had one year of teaching experience, just moved to a new institution at the time of the interview. All five semi-structured interviews were also conducted in Vietnamese, the first language of both the researchers and participants. With permission from the informants, all the interviews were recorded, in which four offline interviews were recorded in a digital audio recorder, and one online interview was recorded via Zoom.

Data collection analysis

The data analysis procedure began with the transcription of all the recorded semi-structured interviews and focus group discussions which were transcribed into Vietnamese. Each transcript was then marked with a filename. The seven focus groups of discussions were coded from FG1 to FG7, and the five personal interviews were coded from PI1 to PI5 to ensure the confidentiality of the research. Later on, the data collected were coded and thematically analyzed. Key points and issues emerged from the data sorting and analyzing process. All the benefits, challenges as well as suggestions for better application of Microsoft Sway in the course were highlighted. The researchers identified all the common themes and sub-themes in the interview and focus group data, then important quotes from transcripts of the interviews and discussions were selected and carefully translated into English to demonstrate the findings and discussion.

Findings and discussion

The data from focus-group discussions and personal semi-structured interviews were analyzed in three different themes, including the experience of participants in applying the online tool, Microsoft Sway, into the course; the benefits it brings about as media-based learning and teaching; and the difficulties that both students and teachers encountered during the application of the e-learning tool.

Teachers and students' experience in applying Microsoft Sway as an online tool

The first section of both focus group discussions and personal interviews aims to explore teachers' and students' experiences in learning and teaching the subject using the media-based tool Microsoft Sway. Students confirmed that they had never heard about this application before, so this was their first first-time experience using Microsoft Sway in the course. It is surprising that none of the students has ever used Sway as a learning tool in any subject before.

"We have to make presentations quite frequently in our subjects, and we often use PowerPoints to illustrate for our group and individual presentations. We have also recently used Canva, another online tool, to make our presentations. However, we have never used Sway before. This is our first-time experience in using Sway to design an online presentation." (FG7)

The interviewed teachers also shared the same idea and admitted that they had never used this online tool before teaching this subject. Therefore, this is a brand-new experience for students and teachers to explore the Sway and its application in the course. One interviewed participant is mentioned as below:

"Although I heard about the application of Sway in teaching English in some English classes elsewhere, I have never used this tool beforehand. It was not until I taught this subject that I had to explore how to use Sway and apply it to my teaching." (PI5)

Teachers and students generally shared quite similar understandings of the task using the tool in this course regarding how they used this online tool in the course of English-speaking country studies. It should be noted that English-speaking country studies have been included in the curriculum for just three years at this university. Moreover, this subject is a blended-learning course in which students have two face-to-face class periods and one online learning period each week. Students were required to apply the specific templates of Microsoft Sway to create online presentations on allocated different aspects of life in English-speaking countries, namely the culture and political life of Singapore, Canada, New Zealand, and Australia. A group of two to three students was assigned a specific topic weekly, and they were asked to use Microsoft Sway to present what they had searched for and synthesized documents related to the given topic. When the interactive online report using Sway was completed, the group of student presenters needed to send their product to other class members for studying. Later on, class members needed to check their understanding of the online presentation on Sway by doing an online test designed by the presenters on a specific testing website called *ontest.vn*. This web-based test can show the detailed result of individual responses, including the score, time duration, time access, and so on. In addition, teachers also revealed that they helped students to check the interactive presentations on Sway before being sent to the whole class for studying:

"In my classes, students are asked to send their online presentations using Sway and the self-designed web-based tests to the teacher for checking and revising if necessary. Then, all links to the Sway presentations and online tests are sent to the whole class for students' self-studying and doing. In fact, students' presentations on Sway are not so

long, they generally aim at presenting what students have searched for on the webs, based on the allocated topics. Personally, I think my students mainly focus on summarizing and presenting the information on given topics, instead of comparing and contrasting what they have searched for about the assigned topics with what they have learnt in class. I rarely see any online Sway-based presentations which give a deep and clear analysis in terms of the content, mostly focusing on presenting and synthesizing the information that students have searched for." (PI2)

Although most student participants and interviewed teachers had a basic understanding of the online presentation requirements in common, the aforementioned teacher's idea was different from what students shared because most students mentioned no requirement of analyzing or contrasting the found information with what they had learned in class. More importantly, when asked for more details about this requirement, Teacher PI2 admitted that there was no specific requirement for students to do so. However, she expected that students should not only present the found information but also compare and contrast the searched information to better their online presentations. Among focus-group discussions, only one group of informants mentioned the idea of making a comparison in terms of the presentation content:

"We are required to make online presentations based on Sway to summarize and present what we have explored and found about a topic assigned by our teacher. All of the topics are about English-speaking countries such as Canada, Singapore, New Zealand, Australia, except for Britain and America because we study about these two countries in class. Sway presentations are for online study only. We often type in some keywords to search for what we need. Although there's no specific website to look for, we often do our searching in some famous websites like Wikipedia, BBC News, etc. to keep updated with the latest information. . . . As far as we know, it's not very clear how updated the found information should be, but we still try our best to find out what can be the latest in the given topics. My teacher highly appreciates such information, and we think that we can also get better marks. Some groups can even compare the searched information of the assigned topics with that of Vietnam, but it's optional. The teacher makes no compulsory requirement about this, so including the comparison or not depends on each group." (FC6)

These aforementioned pieces of sharing showed the mismatch between the students and the teachers' understanding of the assignment task when applying Sway. Though this was not a barrier for students to complete their online presentation on Sway, both sides could remove or avoid it before it was put into practice.

Benefits of applying Microsoft Sway as a media-based learning & teaching tool

The second part of the interview and focus group discussion focuses on the advantages that Microsoft Sway brings to teaching and learning English – speaking Country Studies based on 3 aspects: academic performance, language skills, and IT skills. Overall, both teachers and students reported positive feedback about the effectiveness of Microsoft Sway. Students believed that applying Microsoft Sway in the subject helped them learn more about a new, simple, and easy-to-use online presentation tool. In addition, in the process of designing Sway slides, they learned how to synthesize the information they had found and selected the appropriate information to put on the slides. Also, this process helped students access a variety of useful reference sources.

"What impressed me most about Sway is its simplicity and convenience in designing slides. I only need to input the content and select some photos to illustrate. Then,

Microsoft Sway will automatically design beautiful slides for my presentation. It only takes me about 15 minutes to complete the slides." (FG3)

In terms of their academic performance, students said they got better scores with Sway presentations than delivering oral presentations in class. It was also faster and easier to grasp a large amount of information about the lesson by reading other groups' Sway slides.

"I think that designing Sway slides is easier to get high marks than delivering oral presentations in class. This is especially beneficial for shy or introverted students because they do not need to present in front of the teacher and a lot of other classmates." (FG7)

"As long as you know how to select ideas for your presentation and how to design beautiful Sway slides, your presentation score will definitely be higher. Those who don't know how to design Sway slides effectively can do better after listening to the teacher's comments on other groups' products. Besides, they will learn from experience by sending the teacher a draft for correction and then submit the final version later." (FG2)

Teachers also agreed with the idea that Microsoft Sway could improve students' academic performance.

"During the process of designing Sway slides, students have to apply both synthetic and analytical skills. Thus, their critical thinking can be improved considerably, and it is obvious that their academic performance will also improve." (PI3)

The above finding is consistent with the previous research of Wihartanti & Wibawa (2017), which shows that using technology, particularly web-based learning, can enhance students' academic performance and improve learning outcomes.

Regarding language skills, both teachers and students supposed that reading and writing skills could be improved considerably during the process of creating content for interactive presentations.

"When students search for information for their presentation, they have to read quite a lot of reference materials, and then they have to select which information can be used and how it is organized and expressed to make readers understand. Therefore, their reading and writing skills can be accelerated." (PI4)

Students also noted that they could broaden their vocabulary and knowledge of the subject matter while doing their Sway assignments.

"When we read the reference materials, we could learn many new words and expressions about the topic. Moreover, we had to select the information to present on Sway slides and chose concise words to express our ideas. The main purpose was to make the readers understand what we conveyed without presenters explaining in spoken words." (FG4)

All the participants in the focus group discussions and personal interviews confirmed that Microsoft Sway could be a wonderful web-based tool for teaching and learning online because of its convenience and simplicity. This media app fully supports teachers and students in designing and storing slides online.

"Designing Sway slides saves much more time than designing PowerPoint slides. Everything seems to be available on Sway. I can input the pictures and videos directly on the Sway app just by entering some keywords in the search box. I do not have to google images or videos, then download them and make a copy to PowerPoint slides as

usual. This is an online tool, so my teammates and I could work together easily at home. I am not good at technology, so Sway helps me a lot in designing slides for presentations." (FG1)

Due to the convenience of designing presentation slides, Microsoft Sway is a wonderful tool for those who are not good at technology.

"Sway has more utilities and is more convenient than PowerPoint for e-learning. So, it is a user-friendly web-based tool for delivering presentations online. Even those who are not good at technology can design Sway slides easily. Therefore, I think this is also why students' IT skills are not improved much when using Sway. But knowing how to use Microsoft Sway is very helpful for students' future jobs. The more supporting tools you know, the better your job is, right?" (PI5).

Difficulties encountered during the application of the e-learning tool

Regarding the obstacles hindering the application of the web-based tool, Microsoft Sway, the answers from student informants were not really varied but similar. Most students thought that they had little or almost no technological difficulty in exploring and using Sway though it was their first use.

"Since Sway is a new tool to me, I think it's a little bit difficult for me, but I don't really count on me. Actually, I spent about 15 minutes getting familiar with the web interface, reading the usage instructions of the tool, then I could design basic online pages on Sway. Later on, I practice designing more slides on Sway, which helps me become more skillful in this application." (FC3)

More interestingly, the focus group discussion also revealed the trouble in dealing with the content on the allocated topics rather than the tool itself.

"For me, the most challenging barrier that hinders me in making presentations using Sway lies in the content of the presentation. It doesn't really bother me with technology. I find it quite difficult to search for information related to the given topic; then, it's difficult to select and put all the found information in a logical outline before I really make the online Sway presentation. So, the content related to the topic bothers me a lot, not really the matter of using the tool." (FC5)

In addition, they mentioned that instead of consulting their teachers, they often asked some other members of their class for help if necessary. For example, they asked their friends for tips on how to make the outline faster and how to make the Sway to be unique and outstanding. Also, they admitted that only a few students who were the first groups of presenters needed teachers' support and guidance. They explained that it could be learned a lot from the teachers' feedback and comments on the very first online presentations on Sway. Later on, other groups of presenters could get assistance from the previous presenters, which meant that students continued to apply Sway as an e-learning tool to make their presentations how they thought it should be. This may be one of the reasons leading to the misunderstanding of the requirement or may affect the quality of the interactive presentations on Sway.

Implications

Based on the results from focus group discussions and personal interviews, utilizing Microsoft Sway as a digital tool for teaching and learning English - speaking Country Studies is feasible. In fact, Sway is a very user-friendly tool for both teaching and learning. It is perfect for

assignments that require presenting and synthesizing information or testing writing skills. Sway-based designs produce beautiful, eye-catching, and vivid interactive presentations. Therefore, it is recommended that Sway slides should be used in some other subject assignments that require students' searching and synthesizing skills. Furthermore, teachers can employ digital Sway-based teaching materials in some courses to support students' online learning at home.

The challenges in teaching and learning English - speaking Country Studies do not come from the tool itself but from the course content and how to control students' group work. The following are some implications that the researchers may offer to teachers and students.

For the teachers

Firstly, the teachers should introduce and give clear and specific instructions on how to use Microsoft Sway right from the course's orientation lesson. It is possible that teachers can show some sample designs of Sway slides to help students know what good Sway slides look like.

Secondly, it is advisable for the subject teachers to give specific requirements to evaluate students' final products. This means the teachers should clarify how students should synthesize and analyze the searched information and whether students need to compare and contrast their found information with what they have learned in class. It is ideal for teachers to design an evaluation checklist with detailed criteria and a concrete benchmark for students' products. As a result, the mismatch between the students and the teachers' task requirements could be avoided in advance, and the student's performance could be enhanced.

Thirdly, staff meetings among the subject teachers play an important role in this situation. Teachers are recommended to have discussions with each other at the beginning of the course to ensure that all the requirements, criteria for evaluation, and templates for designing and making presentations on Sway are discussed and shared. They may also make some demonstrative online presentations on Sway themselves, so they can handle students' questions about its application later on. These staff meetings are beneficial not only for the implementation of this assignment task but also for the teachers' professional development; therefore, they should be held regularly.

For the students

Students should study all the assignment guidelines given by the teachers carefully to ensure they are clear about what to do before carrying out the task. This can help them to remove any misunderstanding in the task requirement as well as be able to go on the right track from the beginning.

Students can have peer support during the assignment presentation; however, it's also indispensable for students to consult with their subject teacher throughout the process of selecting the information, making outlines, and designing the presentations on Sway. Teachers are available to give students consultation and support in terms of both technical matters and subject knowledge.

Notably, it is recommended that students are offered more chances to take part in various clubs such as the information technology club in which they can learn how to self-design a video, their own website or online postcards, etc., so they can be better at a variety of designing skills in particular and IT skills in general.

The majority of students were in favour of applying Sway in another course thanks to its benefits and convenience in making an interactive presentation, which is also similar to the teachers' ideas in continuing to use Sway as an online tool in teaching and learning languages.

This leads to the fact that students need to be exposed to a wide variety of media-based tools to better their self-learning and group studying.

Conclusion

This qualitative research attempted to explore the teachers' and students' feedback in applying Microsoft Sway as an e-learning tool for making interactive presentations in a language course. Based on the focus group discussions with students and personal semi-structured interviews with subject teachers, the findings revealed positive feedback from students in the application of Sway in the course in terms of academic performance tasks and language skills as well. Meanwhile, little barriers could be found in terms of technological problems. The content matter bothered students much more, including selecting the most relevant information, arranging it into a logical outline, and so on. Finally, the implications on the criteria for evaluating students' presentations, giving consultation to students, and offering more opportunities for students to access a wide range of media-based tools will be expected to better the application of Sway into language study. Hopefully, the study also carries practical implications for teachers and researchers who want to apply a new learning and teaching e-learning application tool in similar educational contexts.

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