



P-ISSN 2355-2794
E-ISSN 2461-0275

Overcoming a Stumbling Block: Challenges of English-medium Instruction for Vietnamese Tertiary Students

Duong Minh Tuan*
Le Thi Diem Lan

Department of English Studies, Faculty of Foreign Languages, Nam Can Tho
University, Can Tho City 94000, VIETNAM

Abstract

English as a medium of instruction (EMI) is a growing global phenomenon, and non-native English-speaking (NNES) countries have increasingly adopted EMI courses in higher education over the past few decades in response to the momentum of globalization and internationalization. However, implementing EMI initiatives in Vietnam has faced numerous challenges and constraints. While there has been extensive research on the difficulties faced by content teachers in EMI classrooms, there is a lack of scholarly inquiry into the challenges students encounter in EMI programs in Vietnam. Therefore, this study aimed to explore the challenges faced by university students in EMI classrooms. The study used a mixed-methods research approach, gathering quantitative and qualitative data through a questionnaire and semi-structured interviews, respectively. The participants were 120 students enrolled in EMI programs at a public university in the Mekong Delta of Vietnam. The results revealed that students faced significant challenges in their EMI learning course. Precisely, they needed help comprehending course materials, understanding lectures, taking examinations, and participating in classroom discussions. Based on the results of the study, practical implications were discussed to enhance the effectiveness of EMI programs in higher education contexts.

Keywords: Challenges, English as a medium of instruction (EMI), higher education, perception, Vietnamese student.

* Corresponding author, email: dmtuan@nctu.edu.vn

Citation in APA style: Tuan, D. M., & Lan, L. T. D. (2024). Overcoming a stumbling block: Challenges of English-medium instruction for Vietnamese tertiary Students. *Studies in English Language and Education*, 11(3), 1393-1410.

Received January 5, 2024; Revised August 11, 2024; Accepted August 14, 2024; Published Online September 30, 2024

<https://doi.org/10.24815/siele.v11i3.36650>

1. INTRODUCTION

The current globalization phenomenon has prompted many nations to enthusiastically embrace English as the language of instruction, especially in contexts where English is a second or foreign language (Chang, 2022; Perley, 2020). This trend is driven by the desire to gain a competitive advantage in the globalized world and to strengthen communication, interaction, and diplomatic ties with other nations (Humaira, 2023). Besides, ever since English became the global lingua franca, its widespread use has been facilitated by technological advancements and the increasing interconnectedness of societies (Kirkpatrick, 2010). Recognizing the immense potential of English as the dominant language, numerous Asian universities have adopted English-medium instruction as a “policy fashion” to equip their students with the necessary skills to succeed in the global job market, reduce the number of talented domestic students studying abroad and attract foreign students (Byun et al., 2011). It is worth noting that in the competitive landscape of global higher education, local and national universities face challenges in recruiting new students and offering courses in English has become a response to this concern (Doiz et al., 2011), leading to the proliferation of EMI programs in various Asian regions. However, despite the recognized benefits of the EMI approach discussed extensively in research over the past few decades (e.g., Chen & Kraklow, 2015; Lasagabaster & Sierra, 2009; Lo & Lo, 2014; Peng & Xie, 2021), there are still oppositions to these programs in Asian contexts. These oppositions arise from concerns about the preservation of indigenous languages (Appiah & Ardila, 2021; Baker & Hüttner, 2019), linguistic imperialism (i.e., the dominance of one language at the expense of others in multilingual contexts) (Pervaiz et al., 2019), and the challenges in the implementation of EMI, such as teachers’ lack of English proficiency and students’ difficulties in acquiring content knowledge (Doiz et al., 2011; Han, 2023; He & Chiang, 2016; Le, 2012).

In Vietnam, English is currently used as a medium for teaching and learning in many higher education institutions (Dong et al., 2022). The Vietnamese government has endorsed EMI as a strategic measure to improve the quality of higher education, modernize curricula, and enhance the reputation of Vietnamese universities (Le & Nguyen, 2022; Thu, 2021). This aligns with the nationwide advanced and high-quality EMI programs (Phuong & Nguyen, 2019). The argument for these programs is that EMI helps improve English language proficiency, which is directly linked to content exploration (Eriksson, 2018; Huong, 2010; Van, 2008). Therefore, recent policies in Vietnamese tertiary education have led to significant progress in English learning and teaching. Accordingly, English has become a medium of instruction and a means of communication for study and, subsequently, for work. Nevertheless, the trend toward the implementation of EMI appears to originate from the top-down approach, with directives issued from higher levels to those who implement them (Gill, 2006; Macaro et al., 2017). This contradicts Baldauf and Kaplan’s (2005) proposition that successful language-in-education policies rely greatly on efforts from the bottom-up approach. In other words, micro perspectives are crucial for evaluating macro-level policies (Payne, 2017). The top-down implementation of EMI in Vietnamese higher education faces challenges due to students’ limited English proficiency levels and entrenched teacher-centered teaching practices (Pham et al., 2023). Recent research has explored various aspects of EMI in Vietnam, including the perceived impact of EMI on students’ language proficiency (Tran et al., 2021) and the factors impeding students’

comprehension in EMI classrooms (Tran et al., 2020). These studies highlight the importance of adequately preparing for and implementing EMI initiatives to ensure that students can benefit linguistically from such programs. In the context of Vietnam, content teachers play a central role in EMI implementation, and their challenges in this regard have attracted attention, calling for more studies that capture students' perspectives on the potential challenges they face in EMI classes. Considering these issues, the researchers of the current study aimed to highlight specific areas in which Vietnamese students struggled in EMI undergraduate programs in a Vietnamese university context. This study is expected to contribute to the existing literature on EMI and provide policymakers and educators with empirical evidence to base theoretical and pedagogical frameworks for designing and implementing more effective EMI programs in Vietnamese higher education and similar EFL settings. To address the research aims, the central focus of the current investigation was to answer the following research questions.

1. To what extent did Vietnamese university students face challenges in learning an EMI course?
2. What challenges did Vietnamese university students encounter in their EMI learning course?

2. LITERATURE REVIEW

2.1 English as a Medium of Instruction

One ongoing challenge in the field of research on EMI is the lack of a universally agreed definition of EMI. As a result, it is not easy to distinguish EMI from the existing literature on language teaching. The origins of EMI can generally be traced back to the European content and language-integrated learning progress (CLIL), content-based teaching, and bilingual teaching methods in native English-speaking countries (Vu & Burns, 2014). However, it is worth noting that EMI goes beyond mere methodology and extends into policy-making and language planning. Furthermore, the EMI approach is not limited to native English-speaking contexts, as it is widely used in NNES contexts as well (Su et al., 2021), and each context has its own unique concerns. In this study, EMI is defined as “the use of the English language to teach academic subjects (other than English itself) in countries or jurisdictions where the first language of the majority of the population is not English” (Macaro et al., 2017, p. 37). This definition is significant in that it provides a conceptual separation between EMI and CLIL. EMI focuses primarily on subject learning and uses the language of instruction as a tool to perform that objective, whereas CLIL is a dual-focused process aiming to develop both language and content knowledge (Francomacaro, 2011). CLIL does not specify which second, additional, or foreign language is used to teach academic subjects. In contrast, EMI designates English as the medium of instruction. Furthermore, when it comes to teaching subject courses through EMI, language is typically not the primary focus. Instead, the emphasis is placed on comprehending and grasping the content of the subjects being taught (Chang, 2010).

2.2 The implementation of EMI in Vietnam

Despite EMI not being a new phenomenon in Vietnamese higher education, it has recently received considerable attention, with numerous institutions incorporating it into their training programs. Over the past two decades, Vietnam has implemented EMI to cultivate English-proficient human resources in line with global market trends and educational integration goals (Ho, 2022). While practices and processes of EMI vary among institutions in Vietnam, the overall benefits are significant. These advantages include enhancing students' English language proficiency, enriching content knowledge, broadening job prospects, establishing international partnerships, and attracting international students (Hoang et al., 2023). Moreover, EMI has been associated with increased student mobility, which can contribute to a more diverse and internationalized learning environment (Nha, 2017).

However, challenges persist, highlighting the need to address specific hurdles related to EMI implementation (Dong et al., 2022). The execution of EMI in Vietnamese universities is influenced by various factors, including the prevalent use of Vietnamese as the language of instruction, the limited emphasis on English development in the curriculum, and insufficient preparation for teachers and students (Vo, 2021). There are also concerns about the lack of clear communication of EMI policy aims to lecturers, leading to varied implementation approaches based on individual language abilities and understanding of policies (Sahan et al., 2022). Moreover, the implementation of EMI in Vietnam faces dilemmas and tensions related to pedagogical methods, materials, and management (Nguyen & Hai, 2018).

To enhance the efficacy of EMI policies, it is advisable to adopt a flexible approach that considers students' language proficiency and career aspirations, along with comprehensive preparation for policy implementation (Byun et al., 2010). Given Vietnam's resource-constrained context, thorough preparation and strategic deployment of EMI are essential to ensure students derive linguistic benefits from the initiative (Tran et al., 2021).

2.3 Challenges for EMI students

Studies in EMI contexts have presented an overall depiction of the primary challenges faced by NNES students. It has been revealed that English as a foreign language (EFL) students often face various problems in EMI environments. Those include students' challenges in (1) comprehending lectures (Chang, 2010; Hoang et al., 2023), (2) comprehending textbooks (Al-Bakri, 2013; Nguyen & Hai, 2018), (3) participating in classroom discussions (Aizawa & Rose, 2019; Doiz et al., 2012), and (4) taking examinations (Al-Bakri, 2013; Sivaraman et al., 2014).

Firstly, students have difficulty comprehending lectures when learning content subjects in English. Multiple studies have shown that NNES students are dissatisfied with the knowledge they acquire through English (Chang, 2010; Xie & Curle, 2022). This dissatisfaction is correlated with their inability to comprehend lectures (Chang, 2010), primarily due to a lack of a general and technical vocabulary (Altheyab & Alalwi, 2022; Huang, 2012; McKinley & Rose, 2022; Querol-Julián & Camiciottoli, 2019) and ineffective listening strategies (Ali et al., 2021; Huang, 2012). Inadequate language proficiency discourages NNES students from speaking or interacting in English with instructors (Hoang et al., 2023). Consequently, these limitations may

restrict students' opportunities to learn or explore content subjects (Zainuddin & Kamin, 2020).

A study by Chang (2010) indicated that most students believed that the language of instruction posed significant barriers to their mastery of English-taught subjects. These difficulties were rooted in two aspects related to their lack of proficiency in the target language, mainly revolving around the constrained lexicon at their disposal and the lecturer's use of the English language. It was also found that students generally had a low level of lecture comprehension, which was attributable to their low English language proficiency, especially listening skills. According to Amano et al. (2016), a limited level of English proficiency hindered English-medium students' acquisition of knowledge in content subjects. As a result, the students in EMI programs performed worse than those learning science in their native language. Students' weaknesses were particularly evident in understanding abstract concepts and scientific terminology and applying scientific knowledge in real-life situations.

Moreover, if previously students only needed to focus on understanding the content of the course, they now have to focus on two things, including the language used and the subject contents. Similarly, Kirkgöz's (2014) research showed that most students, especially those who perceived that their English proficiency was not good enough, mentioned that EMI reduced their ability to understand core content knowledge and specific details. In addition to students' limited English proficiency, which may hinder their comprehensive understanding of lecture content, the characteristics of teachers also pose challenges for students at times. For instance, the teacher's speaking speed and pronunciation while teaching in English are regarded as reasons for students' lack of understanding (Kagwesage, 2012; Hendriks et al., 2016). Students who cannot keep up with the pace of the lecturer are likely to face difficulties in taking notes and comprehending the explanations.

In addition to the challenges of understanding lectures, students often needed help understanding the content presented in English-language textbooks and course materials. Al-Bakri (2013) and Nguyen and Hai (2018) suggest that reading the course material is a significant challenge for students. For instance, some students have to translate the text in order to comprehend the content (Eser & Dikilitas, 2017). Moreover, due to a lack of vocabulary, they spend much time looking up new and unfamiliar words in dictionaries when reading textbooks. Encountering new words and key terms is a common problem that affects students' reading comprehension (Keuk & Tith, 2013). Furthermore, Chang's (2010) study revealed several factors contributing to students' low reading comprehension, including limited English proficiency, unknown vocabulary, and the difficulty level of English in the reading materials. Among the various problems that cause reading difficulties, limited vocabulary and slow reading speed were the most frequently reported.

In addition, many studies point out that students also need help participating in classroom discussions due to their limited English proficiency (Aizawa & Rose, 2019; Doiz et al., 2012; Lin & Lei, 2021). It has been observed that students often refrain from asking questions in class due to their lack of fluency in English. This presents considerable challenges for students when they express their thoughts clearly. Furthermore, when engaging in authentic communicative situations, students often need more vocabulary to express their thoughts. Therefore, they are unable to sustain the interaction for an extended period of time (Sivaraman et al., 2014). Moreover, low-English-proficient students might suffer from low self-esteem, which inhibits their

participation in classroom discussions that are crucial for their learning (Al-Bakri, 2013). Besides, students find it challenging to actively engage in classroom discussions due to feelings of shame and fear of making mistakes in front of others (Kagwesage, 2012; Shinwari & Miakhel, 2023; Wahyuningsih & Afandi, 2020).

Another challenge faced by EMI students is the difficulty they encounter in understanding examination questions. According to Al-Bakri's (2013) study, students reported struggling to understand the questions posed in exams, leading to incorrect responses due to misunderstandings. Sivaraman et al. (2014) also found supporting evidence for this issue. Their study revealed that some students did not fully understand the questions asked in exams, resulting in unsatisfactory performances. In addition, most students could not write as many details as expected due to their inadequate English language proficiency. Some students resorted to simplifying their writing as they were uncertain about the spelling of certain words. This prevented them from accurately and academically expressing their thoughts and ideas.

3. METHODS

3.1 Research design

The design of this study combined qualitative and quantitative research approaches. Morrison (2007) postulates that the mixed-methods design demonstrates its efficacy by leveraging the strengths of various methods to synergistically reinforce one another, resulting in a complete research picture. In this study, a questionnaire and interviews were used to collect both quantitative and qualitative data. For the quantitative approach, a well-crafted questionnaire was used to provide insights into how participants perceived the challenges they encountered in EMI classes. This method is highly efficient and expeditious in obtaining a substantial volume of data from a considerable pool of participants within a limited time frame. To triangulate and enrich the results, the qualitative method was also used, allowing for a better understanding and clearer interpretation of obstacles facing EMI students. Specifically, a semi-structured interview was subsequently conducted to gather qualitative data and then to support the quantitative results. The interview was used to capture participants' in-depth experiences with EMI programs.

3.2 Participants

A sample of 120 students who majored in biotechnology (60 students) and aquaculture (60 students) was randomly selected for this study using convenience sampling. All participants were enrolled in advanced programs at a public university in the Mekong Delta of Vietnam. The participants consisted of 62 females (51.7%) and 58 males (48.3%), with ages ranging from 18 to 25 years. The participants rated their English proficiency at elementary and intermediate levels, with 44 at the elementary level (36.7%) and 76 at the intermediate level (63.3%). The participants' demographic information is summarized in Table 1 below.

Table 1. Demographic information of participants (N=120).

		Number	Percentage
Gender	Male	58	48.3
	Female	62	51.7
Age	18-25 years old	120	100
Study program	Biotechnology	60	50.0
	Aquaculture	50	50.0
English proficiency	Elementary	44	36.7
	Intermediate	76	63.3

3.3 Research Instruments

A 20-item survey questionnaire was designed based on the existing literature on the EMI landscape (e.g., Al-Bakri, 2013; Doiz et al., 2012; Kırkgöz, 2014; Sivaraman et al., 2014), so its validity and reliability have been previously confirmed in past research works on students' perceptions of challenges in EMI learning. The questionnaire was comprised of three sections. Section 1 captured some demographic information of the participants, including gender, age, email address, English proficiency level, and major of study. Section 2 included four main clusters covering 20 items related to challenges that students might face in their EMI classrooms. These clusters focused on students' difficulties in understanding lectures, comprehending textbooks, taking examinations, and participating in classroom discussions. The observed items in this section were presented on a 5-point Likert scale (i.e., 1 = 'strongly disagree,' 2 = 'disagree,' 3 = 'neutral', 4 = 'agree', and 5 = 'strongly agree'). The questionnaire was directly administered to 120 students in the classrooms by the researchers. It was conducted in Vietnamese to avoid ambiguity and misunderstanding because the participants were not native English speakers. Additionally, the researchers provided direct guidance to the participants to ensure they fully understood how to complete the questionnaire. All questionnaires were completed in the presence of the researchers.

A semi-structured interview was constructed to gain more insights into the participants' challenges in EMI classrooms. The sample for the interview was carefully selected, drawing upon the mean scores of the challenges identified from the questionnaire. Six students representing the three groups of high, average, and low levels of challenges were invited to participate in the interview. For each group, two participants were invited to participate in the interview voluntarily. The questions in the interviews focused on challenges that students may encounter when learning EMI courses and that were not specifically addressed in the questionnaire. Each interview consisted of seven open-ended questions to gather participants' experiences of challenges in specific EMI situations. The interview was conducted in Vietnamese and lasted approximately 45 minutes with each interviewee. Each participant was interviewed face-to-face, and all the responses were recorded by the researchers with the permission of the participants. Moreover, the interviewees were free to discuss their encounters with EMI.

3.4 Data analysis

The quantitative data collected from the questionnaire was coded and analyzed using Statistical Package for the Social Science (SPSS) software, version 20.0. First, a

Reliability Coefficient Test was computerized to confirm the reliability of the items in the questionnaire. Second, a *Descriptive Statistics Test* was run to check for the means and standard deviations of the results on the participants' perceptions of challenges in their EMI learning course. In this study, the interpretation of mean scores was based on Moidunny's (2009) 5-level mean score scale, as presented in Table 2.

Table 2. Interpretation of mean scores (Moidunny, 2009).

Mean score	Level
1.00-1.80	Very low
1.81-2.60	Low
2.61-3.20	Medium
3.21-4.20	High
4.21-5.00	Very high

As for the qualitative analysis, the researchers first transcribed the recorded data from the interviews, which served as the foundation for subsequent analyses. Thereafter, based on the transcribed data, the researchers analyzed the participants' responses using the content analysis method to understand their perspectives on the subject matter of this inquiry. Throughout the data analysis process, the researchers contacted the participants for clarifications whenever ambiguities occurred.

4. RESULTS

4.1 Results from the Questionnaire

As previously mentioned, this study examined the challenges of EMI learning, which included understanding lectures, comprehending textbooks, taking exams, and participating in class discussions. The *Scale Test* was conducted to determine the reliability of the questionnaire. The result showed that the reliability coefficient of this instrument was significantly high ($\alpha = 0.92$). The *Descriptive Statistics Test* was used to calculate the mean score of students' perceptions regarding the challenges of learning an EMI course. The results of this test are presented in Table 3.

Table 3. Descriptive statistics of EMI students' perceived level of challenge.

Variable	N	Minimum	Maximum	Mean	SD
EMI learning challenges	120	1.75	5.00	3.21	0.63

As indicated in Table 3, the overall mean score of the participants' perceptions of their challenges in their EMI learning course was 3.21. This score falls within the range that signifies a high level of perceived challenges, as shown in the aforementioned 5-level mean score scale. Besides, the standard deviation was less than 1.0, denoting minuscule variations in the respondents' opinions ($SD = 0.63$). Overall, it could be concluded that the students faced a high level of challenge when studying in EMI programs.

Table 4 displays the descriptive mean scores for the studied challenges by cluster, which were determined to provide further clarification of the statistical results mentioned above.

Table 4. Descriptive statistics of EMI students' perceptions about each cluster of challenges.

Challenges	N	Minimum	Maximum	Mean	SD
Comprehending textbooks	120	1.33	5.00	3.40	0.76
Comprehending lectures	120	1.60	5.00	3.24	0.74
Participating in classroom discussions	120	1.14	5.00	3.09	0.77
Taking examinations	120	1.60	5.00	3.22	0.67

As shown in Table 4, students found comprehending textbooks, understanding lectures, and taking examinations to be highly challenging, with mean scores ranging from 3.21 to 4.20 each. On the other hand, participating in classroom discussions posed a medium level of challenge for the participants, as indicated by the lower mean score of 3.09.

To offer further insights into specific challenges experienced by the students in an EMI course, the following report presents the quantitative results obtained from the participants' responses to the observed items in the questionnaire.

Concerning comprehending textbooks, 55% of the respondents had difficulty understanding textbooks and course materials written in English due to their limited vocabulary. Other issues related to spending time looking up new words and technical terms in dictionaries and understanding the language and the content were considered significant challenges by 61.6% and 54% of the respondents, respectively.

Moving on to comprehending lectures, 50.9% and 59.2% of the respondents reported problems with assimilating the content of the lectures taught in English and understanding English terminology and science concepts. Besides, 50.8% reported that they just acquired limited content knowledge because of their low proficiency in English listening skills. Nearly 50% of the respondents had difficulties in understanding their lecturers' instructions and explanations and in taking notes during English lectures due to the lecturers' speech rate and pronunciation.

Concerning classroom discussions, encountering difficulty expressing content knowledge in English was reported by 55.8% of the students. 43.4% of them acknowledged that they did not actively participate in in-class discussion activities due to their limited English speaking ability. In comparison, 44.2% reflected that effectively communicating with lecturers and expressing ideas clearly in English were two other noticeable challenges. Asking and answering the questions in English were claimed to be challenging by approximately one-third of the respondents.

As for taking examinations, expressing thoughts and ideas accurately and paraphrasing ideas in English were perceived as challenging by the students, with 55.9% of the respondents agreeing with the former and 55% with the latter. 45.9% of the respondents admitted that they could not write the answers well in detail because of inadequate English vocabulary. Other difficulties, such as understanding English questions asked in tests and final exams and remembering English terminology and science concepts, were cited as challenges by 31.6% and 36.6% of the respondents, respectively.

4.2 Results from the Interview

From the data analysis of the questionnaire, the sample for the interview was selected based on the mean scores for the challenges. Six students representing the three groups of high, average, and low levels of challenge were invited to participate

in the interviews. Two participants were invited to the interview for each group. The questions in the interview focused on challenges that students might encounter when learning an EMI course. The results from the interviews illustrated that most students faced challenges when learning the subject content taught in English. Consistent with the questionnaire results, similar difficulties in comprehending textbooks, comprehending lectures, taking examinations, and participating in classroom discussions were analyzed.

When asked about the challenge of comprehending lectures, all six interviewed participants immediately highlighted this as one of the biggest problems they encountered in EMI classrooms.

- (1) To me, understanding lectures in English is complex. I have to concentrate a lot. However, I sometimes feel lost when the lesson content gets complicated. Moreover, my listening skills need to improve in order to follow the lecture in class. (Student 1)
- (2) If there are some terminologies and science concepts that I do not understand, then I will miss many main points in the lessons. As a result, I do not comprehend the lesson thoroughly, or complete comprehension never occurs. I think listening skills are very important, which can affect my lecture comprehension. (Student 5)

The participants reported that their insufficient knowledge of English terminology and science concepts and their low English listening skills affected their ability to comprehend lectures. Furthermore, when asked about their level of understanding of the lesson content, the majority of participants responded that their comprehension ranged from 40 to 60 percent.

- (3) I only understand about 40% of the content of the lesson. I can't understand new words that I haven't known before. Therefore, I can't grasp the lesson content in class. To overcome this problem, I have to put in more effort and spend more time studying at home. (Student 6)
- (4) To be honest, I understand the lecture at about 60%. I often have difficulty following the lecture because of my limited listening skills. I can't understand many new key terms. Particularly, I can't fully understand the ideas that the lecturer explains in English without showing them on PowerPoint slides. In fact, the extent to which I understand the lesson content is just roughly 60%. (Student 3)

It can be concluded that the overall degree of the students' lecture comprehension was not high, resulting from their low English language proficiency, particularly in terms of listening skills.

- (5) In addition to the difficulties related to terminologies and listening skills, some interviewees further assumed that the lecturers' characteristics regarding their rate of speech and pronunciation sometimes challenged their understanding of the lecture. Specifically, they found it difficult to study with foreign lecturers, as reflected in the following responses.
- (6) The foreign lecturers usually speak so fast that I cannot catch up with their explanations of the lessons. (Student 1)
- (7) Unlike Vietnamese lecturers, foreign lecturers have a different accent, and their ways of pronouncing English words are not familiar to me. (Student 3)

- (8) I have problems with my listening skills when I study with foreign lecturers because they speak so fast, I think. I like to study with Vietnamese lecturers because their pronunciation is easy to understand. (Student 2)

Due to their listening problems, the interviewed participants reported having trouble taking notes during the lecture.

- (9) I often have problems taking lecture notes because I can't keep pace with the lecturer's speaking speed. Moreover, I certainly can't take notes with the words I don't know. (Student 4)
- (10) The pronunciation of some lectures also makes it hard for me to take notes when they are explaining the lessons. I sometimes can't recognize which words they are mentioning. (Student 6)

These interview results are consistent with the results of the questionnaire. Furthermore, the students expressed more concerns when studying with foreign lecturers.

In addition to the difficulty in lecture comprehension, all interviewees reported that comprehending textbooks was another significant challenge, as indicated by their responses.

- (11) I take a lot of time to read textbooks because there are many terms and new words. I have to look up new words in a dictionary, but many words confuse me because one word can have many meanings. Moreover, plenty of words used in textbooks are difficult for me to understand. (Student 3)
- (12) Reading textbooks and materials in English is a burden for me. It takes a lot of time to look up new words in a dictionary. Even if I can understand the meaning of the words, I cannot grasp the meaning of the sentences or the whole paragraph. (Student 6)

In line with the quantitative results, students have difficulty understanding textbooks due to their incomprehension of new words and technical terms. Moreover, one of the interviewees added that the writing style and academic words used in English textbooks hindered his understanding of the subject content.

- (13) I find it challenging to understand the textbooks written in English. The author presents ideas concisely, but academic words and his or her formal writing style require readers to have good English proficiency. However, my reading ability is still limited. (Student 5)

Another challenge reported by the participants was that they had difficulty participating in classroom discussions conducted in English. Although the quantitative results revealed that the students faced a medium level of challenge in participating in classroom discussions, the qualitative results indicated that they experienced a high level of difficulty expressing content knowledge in English because of their limited English speaking skills.

- (14) I find it difficult to answer the lecturer's questions immediately in class because I sometimes lack vocabulary to present my viewpoints. (Student 1)
- (15) I don't often share my ideas in class because I'm embarrassed when speaking English. I'm afraid of using the wrong words, having incorrect pronunciation, and committing grammatical mistakes. I'm not confident in speaking English in front of many people. (Student 6)

- (16) I don't actively participate in classroom discussions, not because I don't understand the lesson, but because of my limited speaking ability. When the lecturer asks a question, I sometimes know the answer but can't explain it clearly because of my limited vocabulary. Moreover, my pronunciation is not good, so I'm not confident speaking English. (Student 5)

It could be drawn out that students were apprehensive about participating in classroom discussions. They also struggled to express their ideas in English. They hesitated to present their thoughts due to their lack of fluency in the target language. In addition, it was perceived that their deficient pronunciation skills eroded their confidence in speaking during English class.

Furthermore, it is worth noting that the students also faced difficulties when taking English exams.

- (17) In relation to writing tests, I found it difficult to express my ideas. I lack vocabulary and have insufficient knowledge of key terms to express my thoughts. To be honest, describing content knowledge in English is very difficult. (Student 1)
- (18) Taking exams in English is difficult. If I don't know some keywords in the questions, I can't understand what the questions are asking about. Therefore, I can't give satisfactory answers to the questions. Even if I understand the questions, I cannot write the answers in detail because I lack vocabulary. (Student 5)

As can be inferred from the interviewees' responses, students' writing skills affected their exam performance. Specifically, students were unable to express content knowledge in English. Besides, their limited vocabulary hindered their ability to clearly and precisely express their thoughts and ideas. Moreover, understanding the questions asked in English was one of the challenges they faced during examinations.

5. DISCUSSION

It is agreed that students play a crucial role in the success of EMI implementation. The results of the study revealed that the extent to which students were confronted with the challenges in learning an EMI course was generally high. The quantitative results revealed that among the four clusters of challenges studied, students found comprehending textbooks, understanding lectures, and taking examinations more challenging compared to participating in classroom discussions. The interview results also indicate that joining in classroom discussions posed a relatively high level of challenge for students.

Comprehending textbooks and academic materials in English was found to be the most significant challenge for EMI students. Consistent with [Chang's \(2010\)](#), [Al-Bakri's \(2013\)](#), and [Altheyab and Alalwi's \(2022\)](#) studies, the main difficulties included limited vocabulary and slow reading speeds, leading students to frequently consult dictionaries for new words and technical terms. Additionally, the writing styles of foreign authors further complicated their understanding, as one participant specifically noted. This difficulty is compounded by the fact that technical jargon and complex sentence structures typical in academic texts require a high level of proficiency in English ([Ducker, 2019](#)).

Lecture comprehension presented another substantial challenge. The questionnaire and interview results highlighted that students struggled primarily due

to their insufficient understanding of English terminologies and scientific concepts, coupled with inadequate listening proficiency. These findings align with previous research by [Chang \(2010\)](#), [Huang \(2012\)](#), [Kagwesage \(2012\)](#), [Kirkgöz \(2014\)](#), and [Ali et al. \(2021\)](#), which suggested that students' English language proficiency, particularly in listening, was crucial for effective lecture comprehension. [Ismail \(2011\)](#) also emphasized that to fully grasp content delivered in English, students must possess sufficient language proficiency. Interestingly, the study found that students comprehended lectures better when taught by Vietnamese lecturers compared to foreign lecturers. This was attributed to students' unfamiliarity with the accents and pronunciation of foreign lecturers. This finding contrasts with [Kym and Kym's \(2014\)](#) study, which suggested that students found content more comprehensible when delivered by native English speakers. This discrepancy indicates that familiarity with the accent and pronunciation plays a critical role in comprehension, potentially more so than the native proficiency of the lecturer.

Classroom discussions were another area where students grappled with significant difficulties. The limited ability of students to speak English hindered their ability to effectively express content knowledge, especially when asking and answering questions in English. This challenge is supported by [Sivaraman et al. \(2014\)](#), who noted that students' lack of confidence in speaking English and fear of making mistakes often led to reduced participation in classroom discussions. [Kagwesage \(2012\)](#), [Wahyuningsih and Afandi \(2020\)](#), and [Shinwari and Miakhel \(2023\)](#) also observed that speaking anxiety and other personal characteristics contributed to students' passiveness during discussions. [Lin and Lei \(2021\)](#) further confirmed that inadequate English proficiency negatively impacted students' participation and academic performance in English-medium courses.

Lastly, exam comprehension problems were identified as a significant issue. This aligns with [Bakhit and Mohamed's \(2021\)](#) research, which found that students had difficulties expressing their thoughts and paraphrasing ideas accurately due to their limited English vocabulary. The results from the interviews highlighted that students were often unable to provide detailed answers because of their vocabulary limitations. [Sivaraman et al. \(2014\)](#) pointed out that students tend to simplify their writing due to uncertainty about spelling, which prevents them from expressing their ideas accurately and academically. This simplification likely impacts their overall performance and ability to demonstrate their knowledge fully during exams.

6. CONCLUSION

This research explores students' perspectives on challenges in EMI programs in Vietnamese higher education. The results revealed that comprehending textbooks, understanding lectures, participating in classroom discussions, and taking exams were common challenges among the participants. By acknowledging and addressing these obstacles, institutions can better support students in their EMI learning journey, ultimately enhancing the overall quality of education delivery in NNEs countries like Vietnam. Besides, the findings emphasize the need for educators and policymakers to develop tailored interventions to address the identified challenges and enhance students' learning experiences in EMI programs.

It is important to consider that English proficiency greatly influences the level of challenge for students in these programs. Students proficient in English benefit more from EMI classes, and less proficient students have difficulty comprehending and handling the subject content. Therefore, it can be inferred that students should achieve a certain level of English proficiency to achieve their ultimate goal of acquiring both language and subject content in EMI programs. Implications for addressing students' low English proficiency include establishing an English threshold and improving students' English proficiency above that level (Byun et al., 2011); otherwise, students suffer from both language and content loss in EMI environments (Kyeyune, 2010; Mohamed, 2013). Moreover, Evans and Morrison (2011) imply that the success of EMI programs may be determined by how efficiently and quickly those problems can be addressed both inside and outside the classroom.

Besides, the results of the present study highlight the need for Vietnamese universities to invest in language support services targeting students enrolled in EMI programs. Higher education institutions can assist students in overcoming language difficulties and enhancing their understanding of complex academic content through various means, such as additional English language courses, tutoring services, and tailored study materials to bolster language skills (Kagwesage, 2012). Moreover, creating a supportive environment that encourages students to seek assistance and utilize available resources can significantly enhance their learning (Han, 2023). In addition, policies that promote the professional development of content teachers in language teaching can contribute to the overall success of EMI programs (Huang, 2012).

From an overall perspective, the present study has attained its aims and provided sufficient information to answer the research questions. However, it is acknowledged that the coverage is limited to a small sample of students, so the results may not be generalizable to all students from different disciplines within or outside the context of the study. Therefore, further research into this field can address this limitation by increasing the sample size, involving students from high-quality training programs or similar EMI contexts, and combining a variety of research instruments, such as surveys, interviews, and classroom observations, to gain deeper insights into the nature of EMI.

ACKNOWLEDGMENTS

We would like to send our special thanks to 120 students of advanced Biotechnology and Aquaculture programs who were very enthusiastic and willing to participate in this study. The study could not have been completed without their involvement and enthusiastic cooperation.

REFERENCES

- Aizawa, I., & Rose, H. (2019). An analysis of Japan's English as medium of instruction initiatives within higher education: The gap between meso-level policy and micro-level practice. *Higher Education*, 77(6), 1125-1142.

- Al-Bakri, S. (2013). Problematizing English medium instruction in Oman. *International Journal of Bilingual & Multilingual Teachers of English*, 1(2), 55-69.
- Ali, R., Shoukat, B., & Kharal, A. A. (2021). Dependence of academic performance on English speaking anxiety in academic programs of English medium instructional context. *Review of Economics and Development Studies*, 7(4), 501-514.
- Altheyab, N. A., & Alalwi, F. S. (2022). English-medium instruction and content learning in freshman year: An investigation of a Saudi university students' challenges and learning strategies. *World Journal of English Language*, 12(6), 1-71.
- Amano, T., González-Varo, J. P., & Sutherland, W. J. (2016). Languages are still a major barrier to global science. *PLOS Biology*, 14(12).
- Appiah, S. O., & Ardila, A. (2021). The dilemma of instructional language in education: The case of Ghana. *Hungarian Educational Research Journal*, 11(4), 440-448.
- Baker, W., & Hüttner, J. (2019). "We are not the language police": Comparing multilingual EMI programmes in Europe and Asia. *International Journal of Applied Linguistics*, 29(1), 78-94.
- Bakhit, M. A. G. & Mohamed, M. Y. (2021). Medium of instruction policy change in Sudan: Its impact on the English language proficiency of Sudanese medical students. *English Language Institute Journal*, 2.
- Baldauf, R. B. J., & Kaplan, R. B. (2005). Language-in-education policy and planning. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (Vol. 1, pp. 1013- 1034). Mahwah, NJ: Lawrence Erlbaum Associates.
- Byun, K., Chu, H., Kim, M., Park, I., Kim, S., & Jung, J. (2011). English-medium teaching in Korean higher education: Policy debates and reality. *Higher Education*, 62(4), 431-449.
- Chang, F. R. (2022). English Language as social capital: A Study of online English private tutoring in Taiwan. *Journal of International and Comparative Education (JICE)*, 71-91.
- Chang, Y. Y. (2010). English-medium instruction for subject courses in tertiary education: Reactions from Taiwanese undergraduate students. *Taiwan International ESP Journal*, 2(1), 55-84.
- Chen, Y. L. E., & Kraklow, D. (2015). Taiwanese college students' motivation and engagement for English learning in the context of internationalization at home: A comparison of students in EMI and non-EMI programs. *Journal of Studies in International Education*, 19(1), 46-64.
- Doiz, A., Lasagabaster, D. & Sierra, J. (2012). *English-Medium Instruction at Universities: Global Challenges*. Bristol, Blue Ridge Summit: Multilingual Matters.
- Doiz, A., Lasagabaster, D., & Sierra, J. M. (2011). Internationalisation, multilingualism and English-medium instruction. *World Englishes*, 30(3), 345-359.
- Dong, L. Q., Le, P. T. N., & Tuyet, N. T. (2022). EMI for engineering-technology students in Vietnam: Challenges and suggestions. *VNU Journal of Foreign Studies*, 38(5), 53-74.

- Ducker, N. (2019). English as a medium of instruction. *The TESOL Encyclopedia of English Language Teaching*, 1-7.
- Eriksson, A. (2018). Redesigning a discipline-specific writing assignment to improve writing on an EMI programme of engineering. *Journal of Academic Writing*, 8(2), 48-66.
- Eser, O., & Dikilitas, K. (2017). Learners' perceptions of translation in English as the medium of instruction (EMI) at university level. *Journal of Education and Practice*, 8(8), 124-129.
- Evans, S., & Morrison, B. (2011). Meeting the challenges of English-medium higher education: The first-year experience in Hong Kong. *English for Specific Purposes*, 30, 198-208.
- Francomacaro, M. R. (2011). *English as a medium of instruction at an Italian engineering faculty: An investigation of structural features and pragmatic functions*. Doctoral dissertation, University of Naples Federico II, Naples, Italy.
- Gill, S. K. (2006). Change in language policy in Malaysia: The reality of implementation in public universities. *Current Issues in Language Planning*, 7(1), 82-94.
- Han, Z. (2023). In English-medium instruction you can walk and chew gum. *Frontiers in Psychology*, 1-11.
- He, J. J., & Chiang, S. Y. (2016). Challenges to English-medium instruction (EMI) for international students in China: A learners' perspective. *English Today*, 32(4), 63-67.
- Hendriks, B., Van Meurs, F., & Hogervorst, N. (2016). Effects of degree of accentedness in lecturers' Dutch-English pronunciation on Dutch students' attitudes and perceptions of comprehensibility. *Dutch Journal of Applied Linguistics*, 5(1), 1-17.
- Ho, T. B. M. (2022). New approach to design EMI courses on blended-learning platform at Hanoi University of Industry. *Journal of Science and Technology*, 58(6A), 92-95.
- Hoang, N. T., Bui, T. N., Le, D. H., & Pham, V. D. (2023). Students' challenges on learning EMI courses at a technical university in Vietnam: An investigation from students' voices. *Proceedings of the AsiaCALL International Conference*, 1, 131-151.
- Huang, Y. P. (2012). Design and implementation of English-medium courses in higher education in Taiwan: A qualitative case study. *English Teaching & Learning*, 36(1), 1-51.
- Humaira, T. (2023). Assessing the impact of convergent thinking ability on English speaking proficiency. *LLT Journal: A Journal on Language and Language Teaching*, 26(1), 41-53.
- Huong, T. T. T. (2010). Learning through English: Insights from Vietnam. In R. Johnstone (Ed.), *Learning through English: Policies, challenges, and prospects* (pp. 96-114). Malaysia: British Council.
- Ismail, A. (2011). *Language planning in Oman: Evaluating linguistic and sociolinguistic fallacies*. Doctoral dissertation, Newcastle University, UK.
- Kagwesage, A. M. (2012). Higher education students' reflections on learning in times of academic language shift. *International Journal for the Scholarship of Teaching and Learning*, 6(2), 1-15.

- Keuk, C. N., & Tith, M. (2013). The enactment of English medium instruction (EMI) undergraduate program in Cambodia: Students' voices. *International Journal of Innovation in English Language Teaching and Research*, 2(2).
- Kırkgöz, Y. (2014). Students' perceptions of English language versus Turkish language used as the medium of instruction in higher education in Turkey. *Turkish Studies*, 9(12), 443-459.
- Kirkpatrick, A. (2010). English as an Asian lingua franca and the multilingual model of ELT. *Language Teaching*, 44(2), 212-224.
- Kyeyune, R. (2010). Challenges of using English as a medium of instruction in multilingual contexts: A view from Ugandan classrooms. *Language Culture and Curriculum*, 16(2), 173-184.
- Kym, I., & Kym, M. H. (2014). Students' perceptions of EMI in higher education in Korea. *The Journal of Asia TEF*, 11(2), 35-61.
- Lasagabaster, D., & Sierra, J. M. (2009). Language attitudes in CLIL and traditional EFL classes. *International CLIL research journal*, 1(2), 4-17.
- Le, D. M. (2012). English as a medium of instruction at tertiary education system in Vietnam. *Journal of Asia TEFL*, 9(2), 97-122.
- Le, N. T. & Nguyen, D. T. (2022). Student satisfaction with EMI courses: The role of motivation and engagement. *Journal of Applied Research in Higher Education*, 15(3), 762-775.
- Lin, T., & Lei, J. (2021). English-medium instruction and content learning in higher education: Effects of medium of instruction, English proficiency, and academic ability. *Sage Open*, 11(4).
- Lo, Y. Y., & Lo, E. S. C. (2014). A meta-analysis of the effectiveness of English-medium education in Hong Kong. *Review of Educational Research*, 84(1), 47-73.
- Macaro, E., Curle, S., Pun, J., An, J., & Dearden, J. (2017). A systematic review of English medium instruction in higher education. *Language Teaching*, 51(1), 36-
- McKinley, J., & Rose, H. (2022). English language teaching and English-medium instruction: Putting research into practice. *Journal of English-Medium Instruction*, 1(1), 85-104.
- Mohamed, N. (2013). The challenge of medium of instruction: A view from Maldivian schools. *Current Issues in Language Planning*, 14(1), 185-203.
- Moidunny, K. (2009). *The effectiveness of the National Professional Qualification for Educational Leaders (NPQEL)*. Unpublished Doctoral Dissertation, The National University of Malaysia, Bangi, Malaysia.
- Morrison, M. (2007). What do we mean by educational research? In R.J. Briggs, and M. Coleman (Eds.), *Research Methods in Educational Leadership and Management*. 2nd Ed. Sage Publications.
- Nguyen, L. V., & Hai, N. Q. M. (2018). English as a medium of instruction: A case study at a gifted high school in Vietnam. *Journal of Asia TEFL*, 15(4), 1083.
- Nha, V. T. T. (2017). The Vietnamese agenda of adopting English as a medium of instruction. *VNU Journal of Foreign Studies*, 33(3).
- Payne, M. (2017). The inclusion of Slovak Roma pupils in secondary school: Contexts of language policy and planning. *Current Issues in Language Planning*, 18(2), 161-180.

- Peng, J. E., & Xie, X. (2021). English-medium instruction as a pedagogical strategy for the sustainable development of EFL learners in the Chinese context: A meta-analysis of its effectiveness. *Sustainability*, 13(10), 5637.
- Perley, B. (2020). Linguistic imperialism. *The International Encyclopedia of Linguistic Anthropology*, 1-5.
- Pervaiz, A., Khan, M. K., & Perveen, A. (2019). Linguistic imperialism. *The TESOL Encyclopedia of English Language Teaching*, 1–12.
- Pham, M., Nguyen, V., Hoa, H., Nguyen, T., Le, D. H., & Barnett, J. (2023). Internationalization and English medium education in Vietnamese universities: Professional role transformation among English language lecturers. *Research in Comparative and International Education*, 18(2), 292-316.
- Phuong, Y. H., & Nguyen, T. T. (2019). Students' perceptions towards the benefits and drawbacks of EMI classes. *English Language Teaching*, 12(5), 88-100.
- Querol-Julián, M., & Crawford, C. B. (2019). The impact of online technologies and English medium instruction on university lectures in international learning contexts: A systematic review. *Journal of English for Specific Purposes at Tertiary Level*, 7(1), 2-23.
- Sahan, K., Galloway, N., & McKinley, J. (2022). 'English-only' English medium instruction: Mixed views in Thai and Vietnamese higher education. *Language Teaching Research*, 1-20.
- Shinwari, M. N. and Miakhel, M. (2023). Factors behind weaknesses of Afghan students' speaking skills. *Integrated Journal for Research in Arts and Humanities*, 3(2), 123-128.
- Sivaraman, I., Balushi, A. A., Rao, D. H. (2014). Understanding Omani students' (University) English language problems. *International Journal of Sciences: Basic and Applied Research*, 13(1), 28-35.
- Su, L. I. W., Cheung, H., & Wu, J. R. (2021). *Rethinking EMI: Multidisciplinary perspectives from Chinese-speaking regions*. Taylor & Francis.
- Thu, H. N. T. (2021). The implementation of EMI in Vietnamese universities: challenges and its possible solutions. *Journal of Science Educational Science*, 66(5), 16-22.
- Tran, N. T., Tran, T. B. T., & Bien, T. T. M. (2020). An exploration of the factors hindering students' lesson comprehension in EMI classes. *International Journal of Language and Literary Studies*, 2(3), 29-42.
- Tran, T. H. T., Burke, R., & O'Toole, J. M. (2021). Perceived impact of EMI on students' language proficiency in Vietnamese tertiary EFL contexts. *IAFOR Journal of Education*, 9(3), 7-24.
- Van, H. V. (2008). Những yếu tố ảnh hưởng đến chất lượng đào tạo tiếng Anh không chuyên ở Đại học Quốc gia Hà Nội (Factors affecting the quality of English education for non-major students at Vietnam National University-Hanoi). *Tạp Chí Khoa Học ĐHQGHN, Ngoại Ngữ*, 24(1), 22-37.
- Vo, T. (2021). *The use of digital technologies in an English-medium instruction context: A case study of Vietnamese higher education teachers and students*. Doctoral dissertation, Te Herenga Waka-Victoria University of Wellington, New Zealand.
- Vu, T. T. N., & Burns, A. (2014). English as a medium of instruction: Challenges for Vietnamese tertiary lecturers. *The Journal of Asia TEFL*, 11(3), 1-31.

- Wahyuningsih, S. & Afandi, M. (2020). Investigating English speaking problems: Implications for speaking curriculum development in Indonesia. *European Journal of Educational Research*, 9(3), 967-977.
- Xie, W., & Curle, S. (2022). Success in English medium instruction in China: Significant indicators and implications. *International Journal of Bilingual Education and Bilingualism*, 25(2), 585-597.
- Zainuddin, S. A., & Kamin, Y. (2020). Facing up to the challenges in teaching and learning English in polytechnics. *LSP International Journal*, 7(2), 37-54.