Investigating Thai University Learners' Attitudes towards English as a Medium of Instruction

Yilin Jiang

A Thesis Submitted in Partial Fulfillment of Requirements for
degree of Master of Education in English Language Teaching
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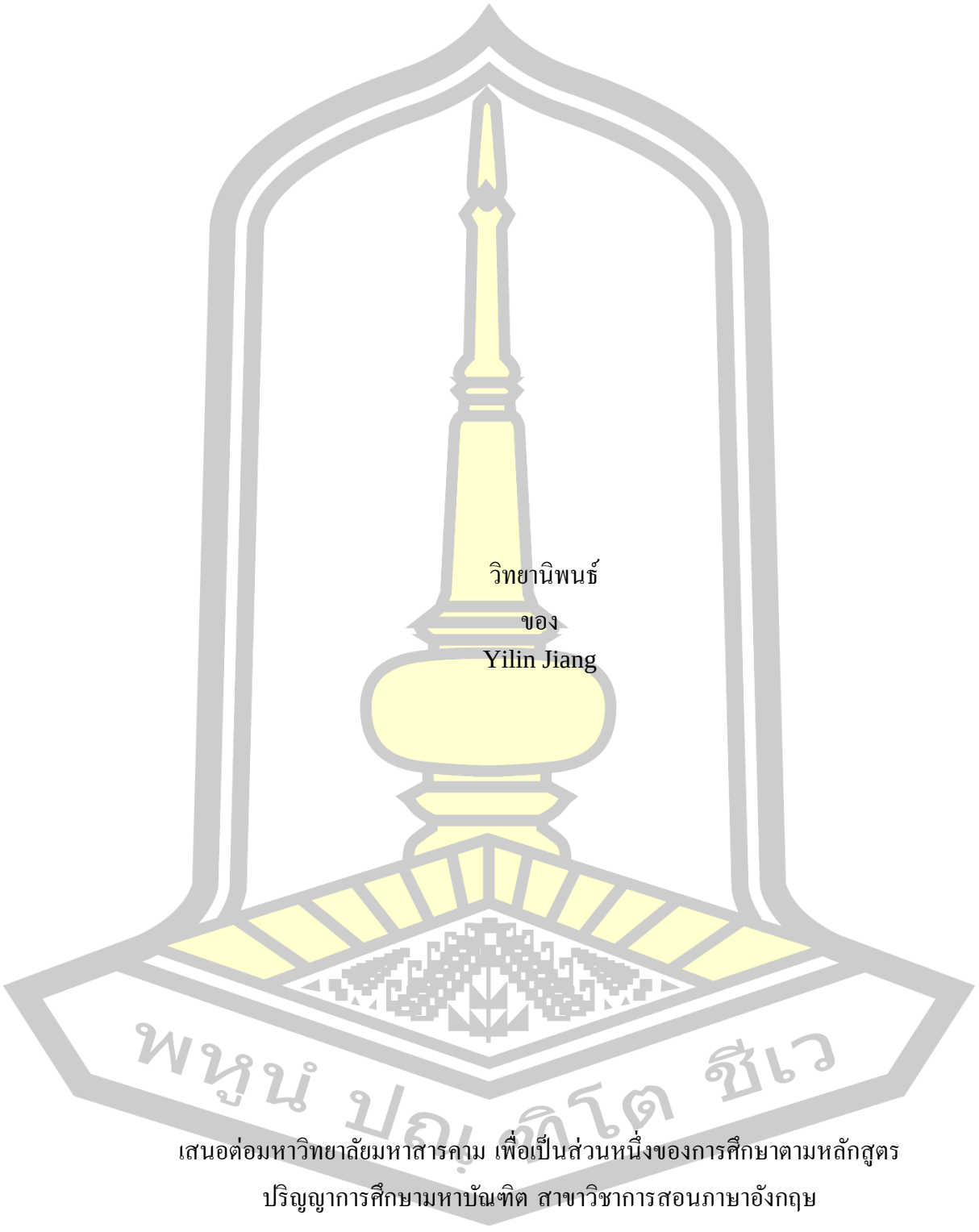

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ABSTRACT

This study investigates Thai university learners' attitudes towards using English as a medium of instruction (EMI). University learners who enrolled in the international programs in a public university were given a five-point Likert scale questionnaire. A total of two hundred and four returned questionnaires were analyzed using means, standard deviations and percentages. A total of 12 participants were randomly chosen for the interview to gain in-depth information about Thai university learners' attitudes, perceived opportunities and challenges of EMI. The results revealed that Thai university learners had a positive attitude towards EMI. The findings also indicated that EMI facilitated learners' overall competence in English language skills and improved their self-confidence and competitiveness in the job market. However, the participants reflected that the expensive tuition fees in EMI programs would increase the economic burden on the family. Notably, a lack of English competence negatively affected both the teaching and learning processes. The qualitative data analysis also provided support to the quantitative results. Additional discussions in light of pedagogical implications and future investigations into EMI are also provided.

Keyword : English medium instruction (EMI), Thai university learners, attitudes, opportunities and challenges

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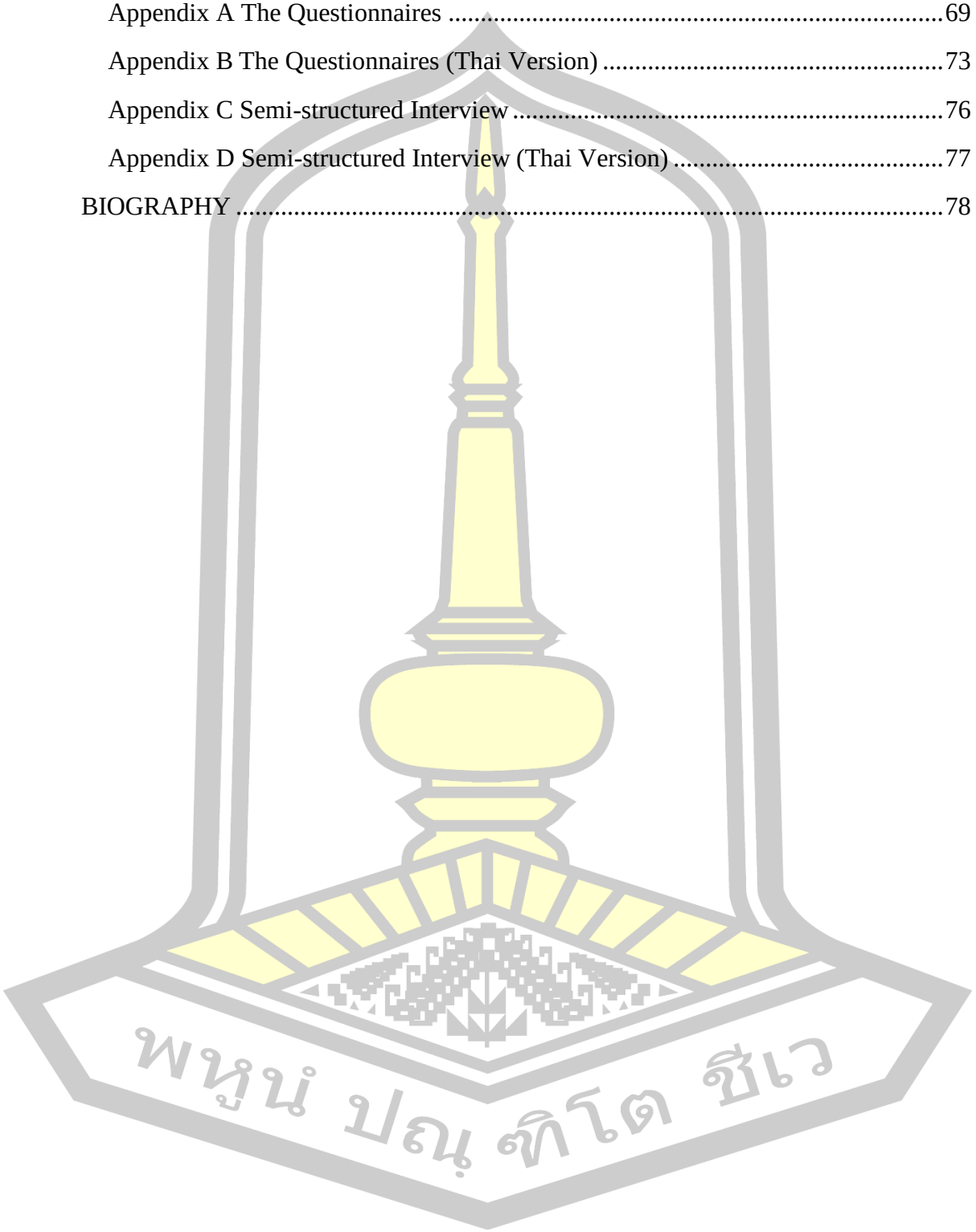

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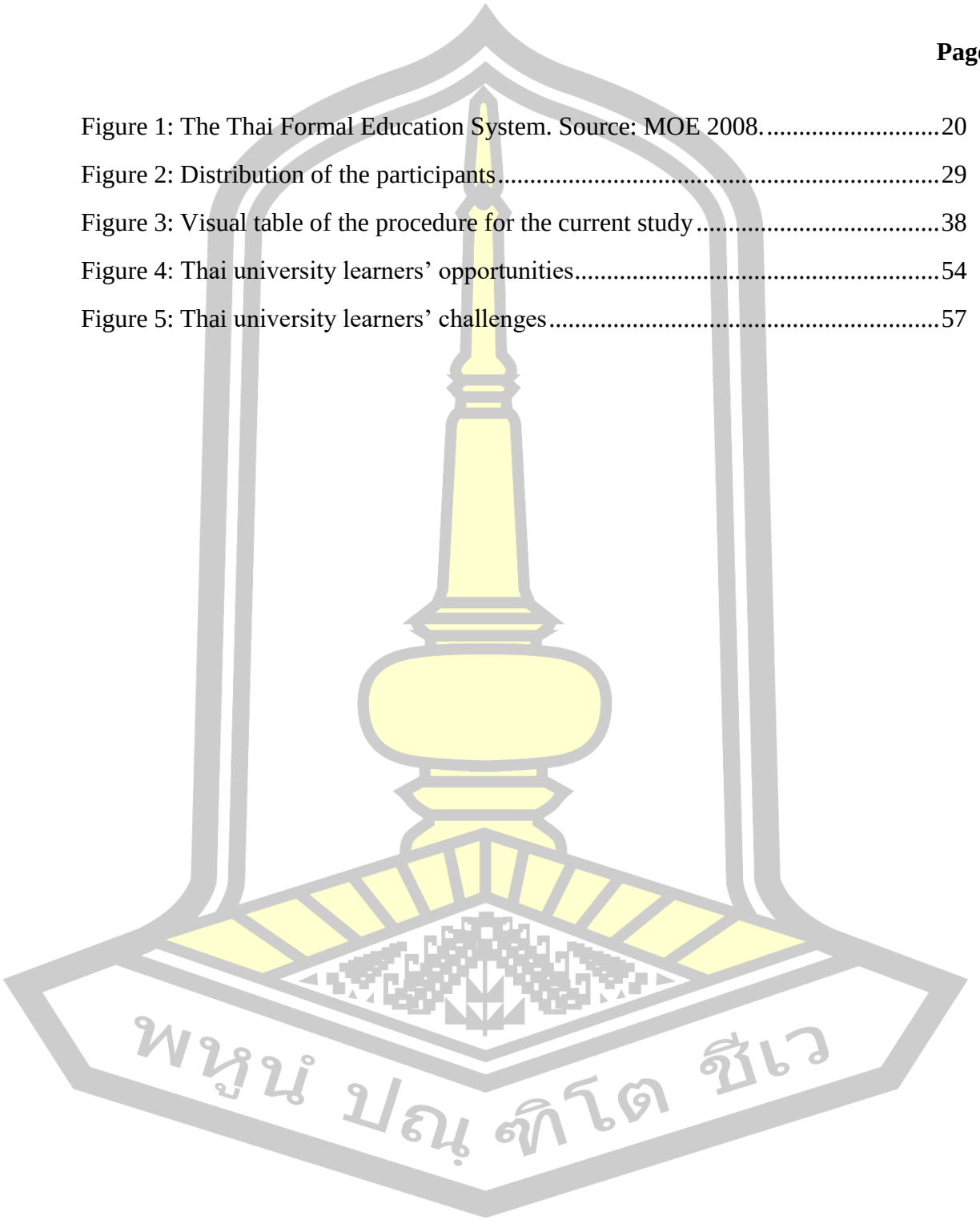

CHAPTER I
INTRODUCTION

There is currently a shift in non-anglophone countries from English being taught as a foreign language (EFL) to English being the medium of instruction (EMI) for academic subjects (Dearden, 2014). Indeed, EMI is now being used ubiquitously and is usually applied to higher education (Macaro et al., 2018). In Thailand, its use in universities has steadily increased over the past few years. However, despite this growth, there is little research into learners' attitudes towards EMI as well as the perceived opportunities and challenges of EMI in Thai higher education. Chapter I presents a general introduction to the study, including its background, significance, purpose, research questions, and definitions of terms.

1.1 Background of the study

It is widely accepted that English is the international language and the primary medium of communication. It is perceived as the key to socio-cultural advancement and might be a passport to a global world (Dearden, 2014, p. 16). The spread of English as a lingua franca has influenced business, politics, culture, religions, education, and language. Indeed, globalization, particularly the advent of the Internet, has facilitated the use of English in all walks of life. The majority of the information in scientific, technological and academic fields stored in electronic systems is in English. As such, people from non-English speaking countries need an adequate level of English skills to access this information.

English has also become a necessary tool for global higher education institutions to be competitive and to promote more internationalization by accommodating learners who use English as a medium of instruction (Chen & Kraklow, 2014). Adopting English as a tool for teaching English in the English as a Foreign Language (EFL) context, especially at the university level, highlights the power of the language in academia and the internationalization policy. This trend is observed in countries where English has been learned and taught as a second or foreign language and has influenced higher education in these countries (Cho, 2012). This growing global phenomenon is reflected in the implementation of English Medium Instruction (EMI)

in Europe, Africa, the Middle East, East Asia and Southeast Asia (Cho, 2012; Huang, 2015).

EMI is defined as “the use of the English language to teach academic subjects (other than English itself) in countries or jurisdictions in which the majority of the population’s first language is not English” (Macaro et al., 2018). Indeed, the main defining criteria of this approach is that it occurs in national contexts where English is not the predominant language of communication outside of the classroom (Rose & Galloway, 2019, p. 195). Over the last three decades, a number of driving forces have led to the adoption of this language approach around the world (Hu & Li, 2017). The positive aspects of EMI ranged from social, linguistic, national, international, and academic areas. The increase in EMI was primarily due to the belief that using English in higher education settings would help learners improve their English proficiency, which, in turn, would help them secure a better, more promising future career. Moreover, the internationalization in education also reinforced the need for EMI. Implementing EMI at tertiary levels sought to balance global and local forces and was touted by the government and institutions as a specific strategy to enhance the competitiveness of national higher institutions and their learners. Therefore, EMI programs have been increasingly introduced at the university level worldwide, including in Thailand.

As stated in the National Education Reform Act in 1999, Thai learners should have global literacy. They must know English and understand the cultures of other countries to be qualified as world citizens. Furthermore, the current English curriculum reform emphasizes learner-centered approaches focusing on raising the level of learners’ foreign language skills for social and business situations in Thailand (Rachakitjanubeksa, 1999). Policymakers, language planners, educators, and teachers in Thailand are intensively addressing the need to increase proficiency in all English language skills. There is currently an ongoing shift in the medium instruction in higher education. Specifically, the Ministry of Education (MOE) aims to have all university classes in all subjects conducted in English or to adopt English-medium instruction. Therefore, Thai universities now offer a wide variety of English-medium programs in many disciplines, both at undergraduate and graduate levels

(Hengsadeekul et al., 2010). The aim of this approach is to strengthen learners' English ability and professional knowledge, and increase academic transaction, which should improve the learners' career prospects and allow them to achieve a more prominent status in the international community. EMI is particularly beneficial for learners who have little or no exposure to English outside the classroom.

The popularity of English-medium programs in Thailand resulted from the pressures of the national education policy, the current job market and the social status associated with such programs. Learners were mainly interested in the vocational benefits of English and were less motivated to pursue knowledge and the English language for its own sake. Indeed, previous research indicated that Thai learners were unlikely to take advantage of the English communication and cross-cultural benefits that were offered to them via academic and social engagements with international teaching staff (Hengsadeekul et al., 2010). Furthermore, under the pressure of both global and local forces, higher institutions are struggling to design EMI programs that can cater to both international and native learners.

Previous studies have shown that learners hold positive attitudes towards EMI and these programs often improve English language skills (Collins, 2010; Dearden, 2014; Ghani, 2018; Islam, 2013; Lasagabaster, 2011; Rogier, 2012; Seikkula-Leino, 2007; Sultan, Borland & Eckersley, 2012; Çağatay, 2019). Most of these studies have been conducted in European countries, with some studies conducted in Asian countries, such as China and Malaysia (Ariffin & Husin, 2011; Barnard & Hasim, 2018; Chang, 2010; Dearden, 2014; Huang, 2015; Wu, 2006). Additionally, a large number of studies in higher education focus on the attitudes among language planners, policy-makers, educators and researchers (Coleman, 2006; Dearden, 2014; Klaassen & De Graaff, 2001; Margić & Žeželić, 2015; Islam, 2013; Sameephet, 2020). However, little research has been dedicated to understanding learners' attitudes towards EMI programs in the context of higher education in Thailand. In their systematic review of EMI research, Macaro et al. (2018) argued that even though there was an increasing interest in EMI, more research needed to be devoted to the attitudes and beliefs held by learners before attempting to evaluate the future of the EMI phenomenon. Moreover, it is unknown whether learners' beliefs and attitudes change over time or

throughout a program of study (Macaro et al., 2018, p. 69) or whether different content areas or contexts could affect these beliefs and attitudes. The current study investigated learners' attitudes towards EMI in a public university in Thailand, including the opportunities and challenges that they associated with EMI programs within the context of Thai higher education.

1.2 Purpose of the study

The current study examined the attitudes towards the implementation of EMI at a government university in Thailand from the learners' point of view. It also examined the opportunities and challenges perceived by Thai university learners when subject content was delivered in English. The following research questions were established to guide the study:

1. What are Thai university learners' attitudes towards English as a medium of instruction (EMI)?
2. What are the opportunities offered by EMI according to Thai university learners?
3. What are the challenges associated with EMI according to Thai university learners?

1.3 Scope of the study

The current study drew on theory and research from Bilingual Education and Content and Language Integrated Learning (CLIL), which are the fundamental pedagogy and theory of EMI. Questionnaires, classroom observation and interviews were used to identify the attitudes of learners towards EMI programs (or "international programs" in Thailand). The learners were studying in international programs to obtain a Bachelor's Degree in a public university in Northeastern Thailand. Learners were from three Bachelor degree programs, including Bachelor of Arts (English for International Communication), Bachelor of Arts (International Tourism Management) and Bachelor of Business Administration (International Business) in the Faculty of Humanities and Social Sciences, Faculty of Tourism and Hotel Management, and Business School, respectively.

1.4 Significance of the study

This study examined the attitudes of learners in EMI programs towards EMI implementation in a Thai university context. Their attitudes towards this practice highlighted issues that should be considered during the teaching-learning process and could provide insights to improve the development of current EMI practices. Furthermore, understanding learners' attitudes towards this policy may facilitate any review process of this policy in the near future. Most importantly, investigating learners' attitudes towards using EMI highlighted some critical obstacles or issues that hindered learning in these programs, which could help inform and reshape current English teaching practices at the institution.

1.5 Definition of terms

"Attitude" refers to Thai undergraduate learners' feelings or opinions towards the use of English as a medium of instruction in an international program in a Thai public university.

"Opportunities" refer to the benefits, support and positive effects that learners gain in their language skills, professional development and future career in EMI programs.

"Challenges" refer to difficulties, problems and unpleasant experiences, including language competence, content learning, psychological and economic burdens**,** that learners face during an international program.

1.6 Organization of the thesis

This thesis includes five chapters, including this introductory chapter. Chapter 2 provides an overview of the history and conceptual theories related to this study, beginning with the historical background of EMI. The conceptual theories of EMI are defined, including the overlaps and differences between EMI, CBI and CLIL, the models of EMI practice at the university level, two approaches for EMI practice and the scope of EMI use. Next, trends and issues of EMI programs in higher education are outlined as well as some of the factors affecting EMI implementation.

Chapter 3 discusses the specific methods used in the current study, including the participants and setting, research instruments, methods, procedures, and data analysis for the questionnaire, classroom observation, and interview. A description of the pilot study is also included, which was conducted to establish the validity and reliability of the main study.

Chapter 4 summarizes the results and provides a preliminary discussion of these results concerning the research questions. Specifically, this chapter reports the results of the quantitative and the qualitative analysis concerning the attitudes of Thai undergraduate learners towards EMI as well as the perceived opportunities and challenges associated with EMI.

Finally, Chapter 5 provides a detailed discussion of the results and outlines the contribution of these results to the field of EMI. Implications for pedagogical practice using EMI and limitations and future research directions are also included in this chapter.

CHAPTER II
LITERATURE REVIEW

This chapter provides an overview of the history and conceptual theories related to this study. It will first describe the historical background of EMI. Then the conceptual theories of EMI will be defined, including the overlaps and differences between EMI and CLIL, the three models of EMI practice at the university level, two approaches for EMI practice and the scope of EMI use. Moreover, this chapter will outline trends and issues related to EMI programs at universities. The factors affecting EMI will be detailed and relevant previous studies on EMI will also be addressed.

2.1 Historical background of EMI

English Medium Instruction (EMI) dated back to British colonial times (Macaro et al., 2018) in "a small number of schools and an exclusive group of indigenous people" and these exclusive groups later "joined the elite of the society who had access to power, wealth, and status, and acted as the auxiliaries to the colonizers" (Tsui & Tollefson, 2004, p. 3). Sah (2020) argued that since this group of English-knowing citizens was provided with well-paid jobs and English was established as cultural capital that provided access to power and privilege, there was an aspiration among ordinary people to learn English. Apart from colonialism, there were two main teaching innovations, Content-Based Instruction and Content and Language Integrated Learning, which laid the basis for the development of EMI.

2.1.1. Content-based Instruction

Content-based Instruction (CBI) aims to teach language implicitly through content-led teaching (Brinton, Snow & Wesche, 1989; Snow & Brinton, 1988; Crandall & Tucker, 1990). The contemporary origins of CBI can be traced to educational innovations in Europe and Canada in the early 1960s, of which EMI programs are a current manifestation (Barnard & Hasim, 2018). The then-recent establishment of the European Economic Community (EEC) gave rise to the founding of European Schools. Learners in these schools were the children of expatriate EEC functionaries and the international business community. The curriculum was initially to be delivered in their first languages, and as many as half of the subjects in the upper

grades could be taught in one of the major working languages of the EEC, including French, German, or, increasingly, English.

There are three major models of Content-based Instruction language education in use at the university level: theme-based, adjunct, sheltered (Satilmis et al., 2015).

The theme-based model is very widely used in foreign language teaching. In this model, scientific subjects in other disciplines are taught in a foreign language, teachers or teams are trained by content expert foreign language teachers (Satilmis et al., 2015). The aim is to develop learners' target language skills irrespective of some institutional settings and language proficiency level of the learners. This model may be considered preparatory education for a sheltered and adjunct model and an important step to reach up to the beginner level at a foreign language.

In a sheltered model, a sheltered content-based course is taught in a second language by a content specialist to a group of learners who have been segregated or sheltered from native-language speakers (Brinton, Snow & Wesche, 1989). In this model, second language is simplified in accordance with the competency level of learners. The sheltered model is known as a means that helps learners understand the lessons given with special support. Two teachers work in this approach: one is a content/subject expert, and the other is a specialist in second language teaching (Brinton, Snow & Wesche, 1989).

Brinton and Snow (1988) explained the adjunct model as two coordinated courses: a content/subject course and a language course. In this model, language and subject/content are taught separately, but coordinated care is provided. Content/subject teacher focuses on the traditional academic topics and concepts while the language teacher emphasizes language skills such as academic reading and writing (Brinton & Snow, 1988). This model is applied and tested in practice in many universities to Second/ Foreign Language learners (Brinton & Snow, 1988).

In Canada, during the same period, immersion programs were becoming popular where children of Francophone parents joined in a curriculum mostly provided in English and children of Anglophone parents were given lessons in French. The Canadian immersion programs were widely spread to countries from Finland and

Spain to Columbia and Japan, with initial reports of the success. Even though the extent of immersion varied by the age of children and the context, it was assumed that the earlier the start, the better. It was also announced that the proportion of the curriculum provided in the target language should be increased upwards of 50% over the years. The Input Hypothesis (1992) by Stephen Krashen gave theoretical justification to Canadian experiments that second language acquisition would be inevitable if the input were comprehensible and the learners were relaxed rather than under stress.

However, the European and Canadian programs did not cater to all the learners but only to those from homes with rich cultural, intellectual and financial capital. According to a 2005 report by the Government of New Brunswick, approximately 20% of learners dropped the program before Grade 5 and very few learners with learning problems participated. It was also revealed that many immersion learners were weak in the linguistic accuracy of their academic work, while they developed a reasonably high degree of knowledge of the curriculum content and oral and written fluency in the target language (Barnard & Hasim, 2018). As a result, it was clear that explicit teaching of the grammatical features of the target language should be considered for learners to learn the language consciously.

In view of all that has been mentioned so far, it can be concluded that CBI had a similar principle to immersion programs in terms of the use of L2 as the choice of medium of instruction. The major distinction between them is that CBI focused more narrowly on language teaching and learning, whereas immersion programs are intended as an approach to general education (Sameephet, 2020).

2.1.2 Content and language integrated learning

A movement towards Content and Language Integrated Learning (CLIL) then emerged in the 1990s, particularly in Europe, with a dual focus on developing curricula content knowledge and target language competence, which broke conventional foreign language programs but gave more purpose to second language learning. Unlike immersion programs, CLIL programs have generally been introduced within the regular state provision of education and have tended to be restricted to specific subjects (e.g., mathematics, social studies) at secondary school while other

subjects continue to be provided in the learners' first language (Barnard & Hasim, 2018).

Content and Language Integrated Learning (CLIL) is a teaching approach to foreign or second language learning in which a foreign/second language is used as a medium of instruction (Tachaiyaphum & Sukying, 2017). CLIL and CBI basically share some aspects of an additional language of instruction and educational goals (Sameephet, 2020). The medium of instruction of the two approaches can be any language except the learners' first language. However, CLIL has unique characteristics. Coyle et al. (2010) explained that CLIL required an integrated curriculum of language- and subject-specific content based on four main pillars: content, cognition, communication and culture, whereas CBI is an approach to language teaching.

Similar to the Canadian programs, learners in CLIL programs tended to be selected from above-average cohorts who were more motivated, demonstrated higher levels of L2 proficiency, often took additional private lessons and had parental support for the program. This was particularly clear in studies from Germany and Spain. In addition, the outcomes of CLIL programs have yet to be fully validated in these circumstances. Several studies in the Spanish context have reported that CLIL learners merely maintained the difference of foreign language proficiency rather than extended it even though they started the program with higher average foreign language proficiency compared to their non-CLIL peers (Barnard & Hasim, 2018). Similarly, a study in Hong Kong concluded that learners who received curriculum content in geography, history, science and mathematics scored lower than those who had the course delivered in their first language.

These studies indicated that CLIL is not an educational panacea, and attention should be paid to how second language learning can best be integrated into school curricula and for whom.

2.1.3 English medium instruction

In the early 1980s, EMI was introduced by the Dutch government to the senior classes of three selected state high schools because there was a high demand for English instruction in schools by a number of Dutch children who were repatriated with their parents. These parents were employed overseas, and their children were educated through the medium of English instruction in international schools. On their return, these children, whose cognitive academic proficiency in Dutch would most likely have been less than that in English, were not accustomed to the Dutch education system, the local learning culture and the type of examinations they would have to take in their senior years (Barnard & Hasim, 2018). As a result, it seemed appropriate that their education in the Netherlands should continue through the medium of English.

However, an analysis by the British Council in the Netherlands revealed that, even with a high standard of communicative English and the required knowledge of English terminology relating to their specific subject, teachers often used English ineffectively for pedagogic purposes to accurately reformulate (both linguistically and cognitively) the statements or explanations in English which learners had failed to understand, and struggled to identify the varieties of English spoken by their learners. Consequently, teachers had difficulties in managing the classroom (Barnard & Hasim, 2018).

Thus, the language development program was introduced to enhance EMI programs. It was based on individual teachers discussing their strengths and weaknesses in both oral and aural English by observing video recordings of their lessons alongside an English language specialist. Systematic reflection on language issues occurred before, during and after teaching subsequent classes in the hope of developing their pedagogic strategies and intending to reinforce the learners' academic and linguistic competencies to meet the requirements of further university study. Learners who engaged in these pilot programs were willing to pursue university programs in the various disciplines in English (Barnard& Hasim, 2018).

According to Murata (2018), English used as a lingua franca (ELF) in academic contexts is one of the major areas of investigation for ELF researchers as increasingly more universities worldwide are introducing EMI to attract learners from all over the world. Since ELF is a relatively new research field, most of the existing or ongoing research on ELF so far has concentrated either on the detailed description of ELF features observed during interactions in various contexts or analyses of attitudes and identities behind the use of ELF as well as its conceptualization (Murata, 2018). In those settings, most of the teachers in East Asian higher education contexts are non-native speakers; ELF is increasingly used as "a shared means of communication" (Murata, 2018). Thus, the "E" in EMI should be seen as ELF instead of a native speaking variety of English.

2.2 The conceptual frameworks of EMI

The notion of EMI is mainly based on Bilingual education and CLIL. Bilingual education refers to teaching and learning undertaken in more than one language (Baker, 2011). It is the fundamental pedagogy of CLIL. Derived from the theory of Bilingual education, CLIL, which is defined as "an educational approach in which various language-supportive methodologies are used which lead to a dual-focused form of instruction where attention is given to both the language and the content" (Coyle et al., 2010, p. 3), is regarded as the root of EMI. To put it simply, CLIL is the fundamental theory of EMI practice, while EMI exists as a subset of CLIL pedagogy.

According to Morgado and Coelho (2013), there are three overlaps between CLIL and EMI. First, there is a focus on specific vocabulary and terminology, and second, learning settings should be created authentically. Finally, both require code-switching between L2 and L1. However, there are clear differences in their methodologies. CLIL supports the learning process of learners' language production, and more time is needed for further explanation and illustration so that learning can be comprehended in L2. By contrast, in EMI, content teachers devise strategies (simplifying, translating) to help learners understand the content (Morgado & Coelho, 2013).

Furthermore, Soruç & Griffiths (2018) concluded that there might at times overlaps among CBI, CLIL and EMI. Still, the essential difference of these three approaches is that “EMI does not directly concern itself with language: this is taken for granted (at least in theory, though it may be different in practice), whereas CLIL and CBI are dual-focused”. They also illustrated the distinguishing feature that EMI can be applied to any level, but it is more common at the tertiary level, whereas CLIL and CBI are common at primary and secondary levels. The geographical distinction showed that CBI originated in and tended to be more commonly used in North America, whereas CLIL is more commonly used in Europe, and EMI is used globally in non-native environments.

There are three models for EMI practice at university levels (Coyle et al., 2010): plurilingual education, adjunct CLIL and language-embedded content course. Plurilingual education requires learners to achieve both content and more than one language during different discipline programs. Learners are asked for a certain level of vehicular language skills (e.g., English) to succeed in the EMI program in order to switch between languages in the immediate situation. Adjunct CLIL is a model where language teaching occurs parallel to content teaching. Content-based instruction approach and meaningful instructional input are used for additional language teaching and content teaching. The last model involves content programs that are designed from the outset with the objective of language development.

The use of English in individual courses can vary tremendously (Hu & Li, 2017), from 100% or nearly exclusive use as the sole language of instruction to being used more or less frequently than learners’ first language. Use may also be restricted to classroom management and/or translation of some concepts, definitions, and formulae.

Two approaches for EMI practice include “extensive instruction through the vehicular language” and “partial instruction through the vehicular language” (Coyle et al., 2010, p. 15). The first approach requires full use of English “to introduce, summarise and revise topics, with minimal switches into the first language to explain specific language aspects of the subject or vocabulary items” (Coyle et al., 2010, p. 15). The approach “partial instruction” is undertaken as bilingual amalgamated instruction by

using code-switching in particular in bilingual classrooms. For instance, one language might be used to brief and summarize the main points while the other is used for the remaining needs of the lesson, such as asking questions and providing feedback (Coyle et al., 2010).

The scope of EMI use can be divided into three components: courses, language skills, and tasks (Ibrahim, 2001). Not all university courses have to encompass EMI programs. Due to the nature of courses, “locally-based” and “culture-specific” courses (such as history, geography, or social sciences) and “reflective” or “creative” courses (philosophy, literature, and art) may be best left in their original form. In contrast, courses often considered “universal” (like mathematics and natural sciences) or “international” (like engineering, business, or accounting) can be attempted in English. Specific disciplines that include jargon and registers may be more easily communicated in the language where the idioms or registers are found, which is often in English.

The second component is the nature of language skills. At the initial stage, EMI classes may not need to cover all language skills. The order of importance of language skills is different between lecturers (reading, speaking, writing and listening) and learners (listening, writing, reading, speaking). Therefore, the gradual progression from receptive skills (listening & reading) to productive skills (speaking & writing) should be reconciled.

Tasks are the third component and are regarded as essential for the success or failure of an EMI program. Tasks should be personalized by relating them to the learners’ knowledge and experience and by taking advantage of learners’ senses. Ibrahim (2001) stated that learner-centered and activity-based teaching methods which provide learners with an opportunity to take full advantage of bilingualism and bi-literacy are worth introducing.

2.3 Trends and issues related to EMI in universities

On the basis of the background and the conceptual frameworks described above, introducing EMI into tertiary education is becoming a trend in Europe and other Asian countries. However, several issues have been raised during the implementation of EMI programs. These pedagogical challenges in universities, especially those encountered in Asian countries, will be discussed in this section.

2.3.1 EMI in European universities

In European contexts, universities in the Netherlands were among the first to introduce EMI programs in the 1980s for Dutch learners to prepare them for the increasingly English-dominant world of business, technology and communication (Barnard & Hasim, 2018). EMI programs stimulated by the Erasmus scheme became popular and spread rapidly across the continent to promote international student exchanges. Such programs were thought to appeal to learners in other European countries who would more easily cope with being taught in English than Dutch. The introduction of Erasmus Mundi further stimulated the growth of EMI programs and attracted learners from outside Europe (particularly those from third-world countries). Over the years, more and more universities strove to attract overseas students by providing innovative and attractive outward-looking EMI programs to enhance their academic profile and competitiveness, and also supplemented their income via increased fees for international students to combat the severe reduction of financial contributions to institutions of higher education by many governments.

2.3.2 EMI in Asian universities

Concerning Asian contexts, EMI programs were introduced to universities in Asia to promote more internationalization and competition.

Malaysia, as one of the first Asian countries to rigorously internationalize its higher education, was colonized by European empires, and the English language was the dominant power and was used in instruction until independence in 1957. However, largely due to a lack of local Bahasa Melayu-speaking academics at that moment, the medium of instruction at schools and universities was first shifted from English to Bahasa Melayu and then back to English for some academic curriculum subjects,

including science, engineering and medical courses, to advance the nation's economic and technological development as well as to promote national unity through the national language as the medium of instruction. Malaysia soon had over one hundred partnerships with universities from Anglophone countries, and "some of their EMI programs derived from partnership arrangements with universities in English-speaking countries and learners could spend one or more semester in a partner university in these countries and/ or were taught in their home institutions with academic moderation by the partner" (Barnard & Hasim, 2018).

In EFL contexts, universities in neighboring countries followed and kept up this major trend for sound financial reasons. Governments in these countries encouraged universities to develop autonomous EMI programs to decrease the costs of partnership arrangements with western universities.

In 2001, the Ministry of Education (MOE) in China announced that all universities "were instructed to use English as the main teaching language in the following subjects: information technology, biotechnology, new material technology, finance, foreign trade, economics, and the law" (Nunan, 2003, pp. 595-596). At least 20% of undergraduate courses were planned to be conducted through EMI as a long-term goal, which led to fierce competition among top-ranking universities. Indeed, "about ten of the most famous universities in China even decided to buy and use almost all of the textbooks being used in Harvard University, Stanford University and MIT" (Liu, 2009).

Similarly, MOE in Vietnam required its universities to make plans "to use English as a medium in their training programs. Priority should go ... to science, economics, business administration, finance and banking" (MOET, 2005: objective 3, output 2). In light of this requirement, both public and private universities have offered multiple EMI programs since 2008. In 2009, the "Global 30" project was launched by MOE in Japanese to "develop degree programs in English to internationalize academic systems and campuses" (www.mext.go.jp), and public as well as private universities offered EMI programs at the graduate and undergraduate level. In Korea, "between a fifth and two-fifths of all courses at most Korean universities are taught via the English medium, with universities vying with each other to announce more courses

taught in English to attract students in a market where demographic decline is making it harder to fill seats". (Sharma, 2011).

However, pedagogical challenges have arisen during the implementation of EMI. Sameephet (2020) debated the current concern about pedagogical challenges and the implications of EMI. He highlighted that while the program came from a perspective of "from policy to practice", policy-making was emphasized without considering actual practice. The complexity of academic English in EMI also posed problems, and the inadequate preparation of lecturers in the English language and pedagogical content knowledge was also noted. Furthermore, he raised the concern that EMI has become the monolingual medium of instruction in a multilingual world.

2.4 Factors affecting EMI

The respondents from 55 countries in Dearden's (2014) study made it clear that EMI was a controversial and sensitive issue in their countries. EMI was sometimes rejected for "political reasons, to protect a national identity, a home language or the freedom to study in a home language" (Dearden, 2014). According to Dearden (2014), five factors were affecting the implementation of EMI in a report commissioned by the British Council in schools and universities in 55 countries across the world, including more than a dozen in Asia. These factors were EMI policies, EMI teachers, EMI learners, first language use in EMI, and threats to local language and educational culture.

In EMI policies, Dearden's survey highlighted a lack of detailed curricular advice and a lack of relevant support and professional development programs for EMI lecturers (p. 24). She commented that "one might have expected some guidelines or policy on a phased introduction, or a recognition that schools or universities had to reach a certain level of proficiency before they could adopt EMI courses" (p. 24). Only Hong Kong, Indonesia and Taiwan have written guidelines about teaching through EMI in East Asian countries.

Concern about the quality and quantity of EMI teachers was the second controversial issue from the report. Dearden noted that teachers needed to acquire the competence of “how to modify their input”, “assure comprehension via student-initiated interactional modifications and create an atmosphere where learners operating in an L2 are not afraid to speak”, and “all this whilst taking into account the many cultural differences present in the room and the potential different language levels of individuals” (Dearden, 2014, p. 22). However, the study of these 55 countries and respondents showed that many “were unaware of a language level, test or qualification for EMI teachers. They had been nominated to teach through EMI because they had been abroad, spoke well or had volunteered” (p. 27).

In Asian universities, the teachers were native speakers of the home language, and some had degrees in English-speaking universities with a high standard of (written) academic competence. However, this did not mean they are well trained to deliver courses in English (Dearden, 2014, p. 31), let alone the lecturers without the opportunity to study or live in English-speaking countries. As such, they may lack the pedagogic ability to teach disciplinary content effectively by modifying their input to cater to learners of potentially different levels of language competence (p. 23).

Another factor was the selection of learners to be educated through the medium of English instruction. Many learners had an insufficient proficiency level due to limited English learning hours during the school years and the variable and uncertain standards of competence required for school-leaving English examinations in Asian universities. This was unlikely to benefit EMI programs. Indeed, for EMI programs to be effective, learners had to spend extra time on after-school classes in profit-making institutions, or study in private English-medium schools, or even attend language schools in English-speaking countries where the medium of instruction is English. This raised a number of questions relating to the socio-cultural and economic implications of EMI programs, which widen the educational gap between what the middle classes could afford and what the working classes had to accept (Barnard & Hasim, 2018, p. 9). Furthermore, as noted previously, more and more universities strove to provide EMI programs to attract high-fee-paying international students. However, few universities seemed to consider the linguistic impact in classes of

learners from different language backgrounds and differing levels of English competence (Barnard & Hasim, 2018, p.10).

As for the first language use in EMI, 76% of Dearden's respondents reported no specific written guidelines about this issue in their country. Recent research indicated that all of the teachers from Asian universities in the case studies code-switched to some extent (greater or lesser) for a variety of reasons. However, it was forbidden or discouraged in English classes (Barnard & McLellan, 2014). The issue of the variety of English used in EMI was extremely pertinent irrespective of the teacher's linguistic competence or whether the program was monolingual (Barnard, 2015; Macaro, 2018). The impacts of the mixture of English varieties ranged from classroom input, interaction and output to every EMI context, which may give rise to some linguistic and/or conceptual confusion.

Finally, concerns about the local language and educational culture were raised in EMI programs. More than half of the respondents in Dearden's report noted that EMI was a sensitive and controversial issue in their countries. In the report, some considered that home language might be used only for daily communication instead of academic use, and EMI pedagogic methods might conflict with the local educational culture. It was difficult to implement EMI programs in countries that "want to protect their home language" as well as "think that students graduating from university to work in business, engineering and medicine should have a deep knowledge of the language in the country where they live" (Dearden, 2014, p. 18).

2.5 English language reforms and EMI in Thai context

Thai is the official language of Thailand and has been used by people in daily communication and academic instruction despite the growing dominance of English.

The first Thai education reform era happened with King Chulalongkorn (Rama V), who paved the way for the emergence of independence and civilization (Hengsadeekul et al., 2010). The English language was only assigned to be studied among royals at that time. In 1921 under King Vajiravudh's reign (Rama VI), English became a compulsory subject for learners to obtain modern knowledge and acquire equality on the international scene. A great change in the English syllabus was

introduced in 1996 when Thailand had to be internationally competitive and needed to internationalize the educational system for an increasingly intercultural global era (Hengsadeekul et al., 2010). Learner-centered learning was emphasized in the National Education Reform Act in 1999, focusing on raising the level of learners' foreign language skills for social and business situations.

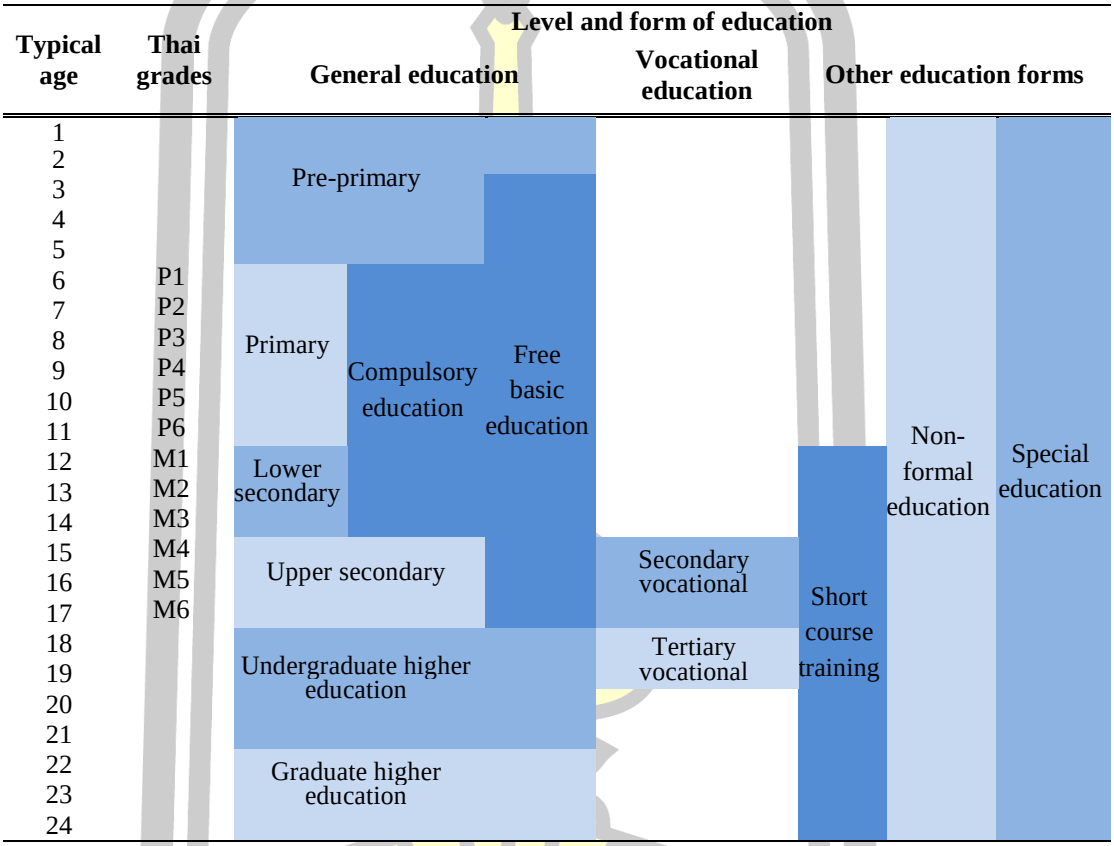

Figure 1: The Thai Formal Education System. Source: MOE 2008.

According to the current Thai formal education system (Figure 1), learners must study English as their first foreign language for at least 12 years before entering undergraduate higher education level. Furthermore, at the tertiary level in Thailand, there have been many programs developed by the government and educational institutions to promote English education, namely international schools, English curriculum, English Program (EP), Mini English Program (MEP), and International Study Programs (Tachaiyaphum & Sukying, 2017). The EMI program is run as an "international program" in which English is used as the sole medium of instruction both at public and private universities in Thailand. The programs offered were usually

limited to mainstream subjects, such as Business Administration, English, or Mass Communication. Thammasat, Chulalongkorn, and Kasetsart were the leading public universities that began to offer international programs for Thai and foreign learners using English as a medium of instruction (Kaur et al., 2016).

Thai MOE has made efforts to instill and promote job-based skills among Thai learners to improve English language abilities. In addition to passing the Ordinary National Education Test (O-NET) - the country's standardized students' assessment taken in Grades 6, 9 and 12 (P6, M3 and M6) each year since the 1999 National Education Act (Table 1), further reforms by the Ministry of University Affairs targeted the areas of language teaching and learning and development of the English curriculum in Thai universities (Kaur et al., 2016). One of the proposals was that universities should recognize English language scores from the English Proficiency Test of the Ministry of University Affairs for university entrance. The changes also emphasized that learners – who opted for English as their language – must complete at least four compulsory courses in English. Courses such as English for Academic Purposes (EAP) or English for Specific Purposes (ESP) are required as major subjects. The learners must also pass the General Aptitude Test (GAT) or the Professional and Academic Aptitude Test (PAT), which is required by the education benchmark. The GAT measured the ability to read, write and solve problems and the ability to communicate in English. The PAT is a suite of assessments that assessed knowledge considered fundamental to study a specific subject at university. Each of these tests lasted three hours (Table 2) and partly measured secondary education outcomes to determine learners' aptitude to enter higher education.

Table 1: Subjects tested in the Ordinary National Educational Test (O-NET), 2015

Subject	Content/areas of assessment
Thai language	Reading, writing, listening, observation, and speaking; principles of language application, literature, and literary outputs.
Mathematics	Numbers and numerical work, measurement, geometry, algebra, data analysis and probability, mathematic skills and procedures.
Science	Living beings and life processes, life and environment, properties of matter, force and mobility, energy, earth studies, astronomy and space, the nature of science and technology.
Social science, religion and culture	Religion, morality, and righteousness; civil responsibility, culture, and life in society; economics; history; geography.
Foreign languages	Language and communication; language and culture; the relationship between language and other subject groups; the relationship between language, community and work.

Table 2: National student assessments in Thailand

Test name		Target group	Content
Ordinary National Education Test	O-NET	Students at the end of general primary, lower secondary and upper secondary levels (P6, M3 and M6)	Eight subject groups: Thai language; social studies, religion and culture; foreign languages; mathematics; science; health and physical education; arts; and occupations and technology.
General Aptitude Test/ Professional and Academic Aptitude Test (since 2009)	GAT/ PAT	Secondary school graduates wishing to be admitted to higher education within the national admissions system.	GAT: Reading, writing, critical thinking, and English. PAT: Seven common subjects: Thai language, social studies, English, mathematics, chemistry, biology and physics.

Source: NIETS (2015), www.niets.or.th/en/catalog/view/2211.

Overall, the Thai government has long realized the importance of the English language at all levels of education. As such, the use of English is overwhelmingly increasing and has become a compulsory subject and the first foreign language for studying in Thailand. In line with this, the focus of this study is a Thai university currently in the process of introducing EMI. The university is Thailand's 22nd government university, established on December 9, 1994, when the University Act was graciously authorized by His Majesty King Bhumibol Adulyadej and published in the Royal Gazette. It is a comprehensive university with 18 faculties, two colleges and one school and has been widely recognized as one of Thailand's fastest-growing universities. The faculties of Humanities and Social Sciences, Hotel Management and Tourism, Business School are international programs based on EMI and enroll international students from Cambodia, China, India, Indonesia, Japan, Laos, Pakistan, South Korea, Sudan, Taiwan, UK, USA, and Vietnam every year.

2.6 Related studies about EMI

Previous studies have reported that learners have positive views towards the implementation of EMI and related programs.

For example, Seikkula-Leino (2007) found that, although there was no significant difference in learners' achievement in understanding learning content, motivation increased when compared with learners who were only involved in first language (L1) instruction. Lasagabaster (2011) also found that the learners' motivation increased, contributing to their English learning progress. Furthermore, Ghani (2018) demonstrated that most participants held positive attitudes towards EMI courses affectively, behaviorally and cognitively.

In Turkey, results showed that learners felt disadvantaged during their college years due to self-perceived low language proficiency. However, both the learners and the instructors believed that if the system were improved, it would provide great benefits to the whole university learner population, not only in Turkey but in all EU Countries. It has been recommended that Turkey should further expand its language education by promoting the acquisition of a second language in order to have a head start on its own ascension into the global community, modeling itself on the EU aspirations for a majority of their citizens to speak two foreign languages (Collins, 2010). Rogier

(2012) demonstrated a statistically significant score gain in all four of the English-language skill areas that were tested by the IELTS exam after four years of EMI. The most gain occurred in the area of speaking, followed by reading, writing and then listening.

With regard to educational effectiveness and difficulties, a study in a Bangladesh private university indicated that participants had conflicting views on the effectiveness of EMI in relation to learners' understanding of course content and whether EMI classes actually improved learners' English proficiency. Nevertheless, learners generally supported the EMI policy when considering their future careers within the global world (Islam, 2013). Yang (2015) also illustrated that the significant improvement of learners' receptive linguistic skills was positively correlated with an improvement in their productive English competence. EMI program learners also performed better than those enrolled in a non-EMI program in the national English examination (Sultan, Borland & Eckersley, 2012). This is likely due to the learners' improved attitude towards using English in and outside school (Sultan, Borland & Eckersley, 2012). ELT learners also held more positive attitudes than those from other programs, and females held a more positive stance towards EMI than males (Çağatay, 2019).

Implementing EMI is not without challenges. Klaassen and De Graaff's (2001) study of the EMI practice at the Delft University of Technology in the Netherlands highlighted that methodological and language-related challenges were common in EMI programs. Others have argued that it was necessary to train local lecturers and learners in EMI practice due to insufficient language skills in the context of the universities in Europe and Turkey (Coleman, 2006; Kırkgöz, 2009). Learners' responses to 31 non-native English-speaking lecturers at a major business school in Denmark revealed that the learners' perceptions of the lecturers' English language proficiency were a significant predictor of their perceptions of the lecturers' general lecturing competence and vice versa (Jensen et al., 2013). This may reflect a two-way relationship caused by speech stereotypes similar to those which have been demonstrated in social-psychological experiments (Jensen et al., 2013) and should be

addressed when universities use learner ratings to evaluate teaching in English-medium content courses.

Attitudes towards the use of EMI in higher education varied according to different contexts. In Croatia, despite the progressive academic internationalization and the spread of English-taught programs Europe-wide, university instruction was almost exclusively carried out in its mother tongue (Croatian), and the implementation of EMI was largely met with skepticism, concern, and fear. Indeed, it has been shown that many respondents were neither willing to tackle EMI nor did they believe courses should be taught in English because they were skeptical about the ability of lecturers and a lack of motivation to use English where Croatian was an option (Margić & Žeželić, 2015).

Similar results were found in Asian countries. In Indonesia, due to its classroom-based nature, it has been argued that EMI was unlikely to develop the four language skills (listening, reading, speaking, and writing) equally for both learners and teachers (Ibrahim, 2001). On the other hand, the assumption that EMI would automatically result in bi-literacy was unsupported because only bilinguals competent in both languages could take full advantage of their bilingualism in EMI classrooms. Learners or teachers who were not adequately developed in the language were likely to suffer academically, socially, and psychologically. Joe and Lee's (2013) study in a Korean context provided a similar perspective on EMI practice. Even with a high level of English proficiency, medical learners still needed a lesson summary in their L1 when completing each EMI class. In Kazakhstan, Zenkova and Khamitova (2018) demonstrated a rather positive general attitude of the respondents to English-medium instruction at the university, a special emphasis was made on the global status of English and internationalization of education. However, the majority of respondents raised concern about the impact of English-medium teaching on the quality of subject learning since it depended on the high English proficiency level of both learners and teachers and their motivation to study and teach in English.

In China, Wu (2006) examined college learners' attitudes towards EMI in terms of the feasibility and the likely obstacles of EMI in an EFL learning environment. While recognizing the benefits of EMI, most learners reported difficulties in understanding the content and learning materials. Similarly, Chinese learners also reported that they did not think that they had a high level of comprehension of their EMI lectures (Chang, 2010). Huang (2015) demonstrated the association between learners' learning motivation, learning anxiety and learning achievement and showed that local Chinese learners tended to report more learning difficulties than foreign learners and, hence, felt stress from the content comprehension as well as from peer competition. Although this may reflect the level of English competence and practices of the individual lecturers involved, learners' English proficiency was not sufficient to adapt to the EMI learning environment. Therefore, mother-tongue medium instruction may be more helpful to develop an understanding of difficult concepts, and dual-medium teaching would be more appropriate (Islam, 2013).

At the tertiary level in Thailand, limited studies have highlighted the factors that influenced the participants' (lecturers or learners) perceptions or language beliefs and language practices in EMI programs. Hengsadeekul et al. (2010) explored the reasons behind learners' perceptions concerning the language of instruction. Language proficiency, language anxiety, perceived benefits of learning English, identity issues, motivational and goal orientation were all identified as important factors affecting learners' perceptions. Recently, Sameephet (2020) conducted the first substantial qualitative case study in Thailand to investigate the lecturers' language beliefs and practices in EMI classrooms. The lecturers revealed that external factors (policy, classroom infrastructure, and learners) and internal factors (the lecturers' own language preferences and proficiencies) were crucial to shape and inform the lecturers' current language beliefs and language practices. Furthermore, the lecturers used code-switching and translanguaging when faced with dilemmas in English medium instruction classrooms (Sameephet, 2020).

2.7 Summary of the chapter

Overall, previous studies have provided evidence that learners held positive attitudes towards the use of EMI in higher education because it increased learners' motivation, developed their English language skills, prepared them for the global job market, improved their grades, attracted more international students for their university, and accelerated globalization for their country. Nevertheless, EMI was also associated with methodological and language-related challenges. For instance, there was no standardized norm for the prevalence of EMI, especially in countries where the L1 maintained its dominance. In addition, learners' four English language skills developed unequally, which might cause learning difficulties. The increasing population of international students could also lead to learning anxiety in local learners. Finally, both lecturers' and learners' insufficient language skills and language proficiency might dampen the effectiveness of EMI programs.

Importantly, few studies on EMI have been conducted in the context of Thai higher education. The studies that have been conducted focused only on the factors affecting learners' perceptions, lecturers' language beliefs and language practices. The present study occupied an important gap in empirical research in Thailand for several reasons. It focused on undergraduate classes in an international program, and all the learners were Thai nationals. In addition, actual classes in EMI programs were observed. Most importantly, learners' opportunities and the challenges they perceived concerning EMI were identified.

CHAPTER III
RESEARCH METHODS

This chapter outlines the research methodology of the current study, including the participants, instruments, methods, procedures, and data analysis.

3.1 Participants and setting

The main study was conducted at a government university, the Center of Education, in the northeast of Thailand. It is a public and progressive university that offered a world-class panorama with an environmentally responsible focus and sustainable projects. As a comprehensive public university, it offered 87 Bachelor-degree programs in the fields of Health Sciences, Humanities and Social Sciences and Sciences and Technology. Approximately 400 undergraduate learners were enrolled in the international program, according to the figures on the university website.

There were two programs at the university, the Thai program and the international program. English as the medium of instruction (EMI) was offered for the international program, whereas the native language (Thai) was used in the Thai program. The international program at this university consisted of three Bachelor degrees, including a Bachelor of Arts (English for International Communication), Bachelor of Arts (International Tourism Management) and Bachelor of Business Administration (International Business), in the Faculty of Humanities and Social Sciences, Faculty of Tourism and Hotel Management, and Business School respectively. The lecturers in the international program were all Thai nationals, and some had degrees in English-speaking universities with a high standard of academic competence.

This study investigated the implementation of EMI in a Thai context to examine Thai EFL learners' attitudes towards EMI and their perceived opportunities and challenges in EMI classrooms. It included a total of 204 undergraduate learners from the international program. The participants were Thai EFL learners at different stages of their studies and ranged between 18 to 22 years of age at the time of data collection. All participants were Thai native speakers using their L1 to communicate with their friends or classmates at school, and none had studied English in an English-speaking country.

As shown in Figure 2, the participants, who ranged from the first year (48 learners, 24%) to fourth year (46 learners, 23%) students, had studied English as their first foreign language for at least 12 years during the basic education level, including six years of primary education, three years of lower secondary education and three years of upper secondary education. There were 47 male learners (23%) and 157 female learners (77%), which included English for International Communication (EIC) majors (81 learners, 39.7%), International Tourism Management (ITM) majors (77 learners, 37.7%), and International Business (IB) majors (46 learners, 22.5%).

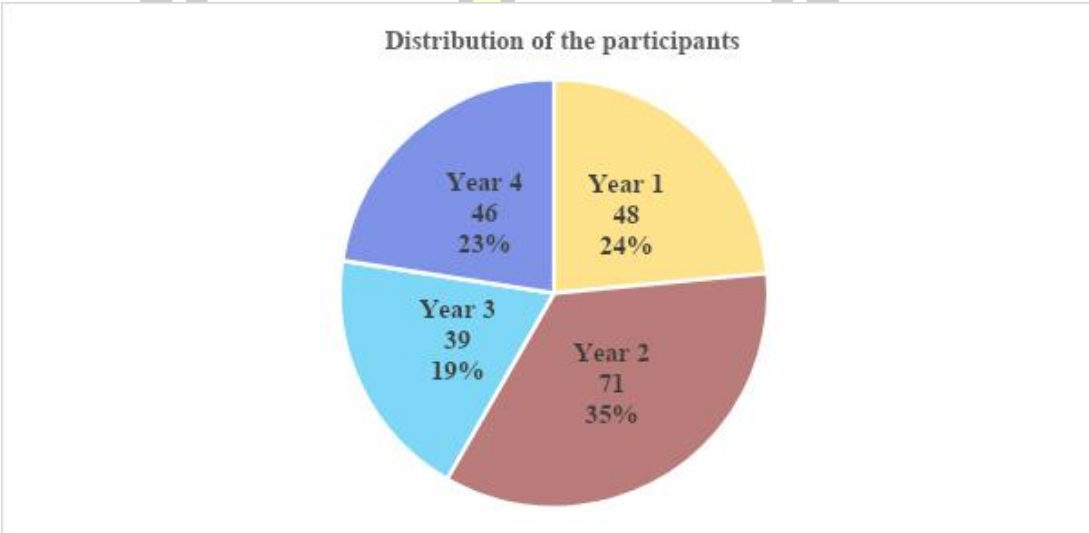

Figure 2: Distribution of the participants

Out of the 204 participants, 200 learners (98%) reported their English language test scores officially obtained from O-NET (Ordinary National Education Test), GAT (General Aptitude Test) or PAT (Professional and Academic Aptitude Test). Three learners (1.5%) took the IELTS (International English Language Testing System) test and 1 (0.5%) completed the TOEFL (the Test of English as a Foreign Language).

3.2 Research instruments

The study used three different types of data collection instruments: questionnaire, classroom observation and interview. These instruments are described in detail in the following sections.

3.2.1 Questionnaires

All classes were administered online at the time of data collection due to the Covid-19 pandemic. The questionnaire in Thai version was sent via emails to all participants to investigate the implementation of EMI in the international program and to measure learners' attitudes towards learning the subject content in English. The aim was to evaluate the learners' opinions as to the opportunities and potential challenges of using EMI at a public university in Thailand.

The questionnaire used in the study was developed based on previous studies examining university learners' attitudes, opportunities and challenges related to the medium of instruction in different contexts (e.g., Ariffin & Husin, 2011; Belhiah & Elhami, 2015; Curle et al., 2020; Ellili-Cherif & Alkhateeb, 2015; Rose & Galloway, 2019; Tachaiyaphum & Sukying, 2017). The questionnaire items were modified to suit the context of the current study and its purpose. The first part of the questionnaire focused on demographic information, including age, gender, department, grade, time spent learning English, overseas experience, language used in teaching, learning practices and exams, and the recent English exam and its score. The second part contained 30 five-point (strongly agree = 5, agree = 4, neutral = 3, disagree = 2, strongly disagree = 1) Likert scale questions items related to three main variables: learners' attitudes towards EMI, opportunities towards EMI, and challenges related to EMI. The combination of positively- and negatively worded items was used to reduce acquiescence bias (which means respondents tend to agree with all or almost all statements in a questionnaire) in the Likert scale questionnaire (Salazar, 2015). The number of negated statements, which could include a negative word (e.g., not) or include an antonym (e.g., be afraid), and positive statements was equated (15 items each). Two open-ended questions were included in the last part of the questionnaire to gain more personal opinions from the respondents (Table 3). Both Thai and English were used in the questionnaire to ensure that language would not be a barrier to understanding the questions (see Appendices A & B).

Table 3: Questionnaire items

No.	Category	Content
Part 1	Demographic information (11 items)	Gender, nationality, department, grade, years of English learning, overseas experience, language used in teaching, learning practices and exams, the recent English exam and its score, interview permission
Part 2	Five-point Likert scale questions (30 items)	1. Learner's attitudes towards EMI (10 items) 2. Opportunities towards EMI (10 items) 3. Challenges related to EMI (10 items)
Part 3	Open-ended questions (2 items)	Opportunities & Challenges

3.2.2 Classroom observation

Observation provides the opportunity to collect real-time data from natural situations. Thus, after collecting and analyzing questionnaires, three classrooms from three majors in the international program, which used EMI, were selected randomly and observed respectively within one week. The duration of each class was 180 minutes. Direct evidence was collected regarding what occurred in the classrooms, including the patterns and features of the teacher's pedagogical practices and classroom activities. The observed classes were coded and only the name of the major is provided to protect their anonymity (see Table 4).

Table 4: Observed classes

Class code	Major	Faculty
C1	English for International Communication	Faculty of Humanities and Social Sciences
C2	International Tourism Management	Faculty of Tourism and Hotel Management
C3	International Business	Business School

In order to effectively capture the learners' reactions to the teaching practices and the teachers' verbal interactions with their learners, classes were video-recorded, with the assistance of a Thai collaborator to interpret Thai, which was occasionally used by lecturers and learners during the classes. Furthermore, a non-participant observation technique was adopted to observe and record what was happening in the specific classrooms. This means that, while the researcher and collaborator were present in the classroom, they did not participate in any classroom activities. The language use of the teacher and the activity structures were analyzed and described using Lara-Alecio and Parker's (1994) pedagogical model, which has been adopted as a basic schema for observing and describing pedagogical practices in bilingual classrooms (e.g. Garza et al., 2018). Further details are provided in Table 5.

Table 5: Activity structure, time allocation and teacher's language use

Activity structure **Approximate average time spent per 180-min class** **Teacher/learner behaviours**	**Descriptions**
Teacher monologic lecturing (TML) Lectures/listens + reads	
Teacher-student interactions (TSI) Asks/answers	
Student group presentation (SGP)	
Listens/presents	
Evaluates/listens	
Teacher language use	
English-only	
Thai-only	
Code-mixing/switching	

3.2.3 Interview

The interview was used to elicit in-depth responses from interviewees to gain a more profound understanding of the interviewees' own experiences. Twelve interviewees were randomly selected and interviewed (audio-recorded), using a semi-structured interview technique. Several questions were formulated to address three central themes: 1) What are Thai university learners' attitudes towards English as a medium of instruction (EMI)? 2) What are the opportunities offered by EMI according to Thai university learners? and 3) What are the challenges associated with EMI according to Thai university learners? The semi-structured interview consisted of nine predefined questions and aimed to enrich and support the survey answers with further qualitative data (see Appendices C & D). Other probing questions were occasionally added where appropriate.

The interviewees were randomly selected from the international program according to their major and grade level. Four interviewees were selected for each major from different stages of their studies, yielding 12 interviewees in total. The length of each interview ranged between 30 and 60 minutes. With the assistance of an interpreter who can speak Thai and Chinese, the interview was conducted online in Thai because the interviewees felt more comfortable expressing their opinions in their first language, and they could provide rich and in-depth information in Thai. The interviewees were informed of the aims, structure, procedures and duration of the interview before it commenced. The identity of the interviewees remained confidential. All interviews were transcribed verbatim and translated into English. The transcriptions were then returned to the interviewees for verification. The interview data was then analyzed using qualitative content analysis (Corbin & Strauss, 2008; Dörnyei, 2007; Flick, 2006).

3.3 Data collection procedure

The validity of the content was judged by five different experts who had more than 10 years of teaching experience in the field of linguistics. These experts estimated whether each item accurately measured the expected aspects by using the index of Item Objective Congruence (IOC). The IOC index was developed by Rovinelli and Hambleton (1977) to screen the quality and evaluating content validity and reliability of the items in the questionnaire and interview.

As reported by Morrel & Carroll (2010), piloting was commonly used with all types of research designs to enhance the legitimacy and trustworthiness of the data-gathering instruments. Thus, following the experts' appraisal of the questionnaire items, the questionnaire and interview were piloted with a small group of overseas learners who did not participate in the main research study to ensure that the respondents would not encounter difficulties during the main study.

Then, after permission was obtained from the university and its faculties, the questionnaire was distributed and collected electronically through JotForm for approximately one week. Next, the randomly selected lessons were observed and video-recorded to examine EMI implementation during the following week. Following the classroom observation, the audio-recorded interview was given to 12 interviewees individually to discuss their questionnaire answers and classroom performances in detail. Interviewees were informed of the aims, structure, procedures and duration of the interview before it commenced, and the participants' confidentiality was maintained. A summary of the data collection procedure is shown in Table 6.

Table 6: Summary of the data collection procedure

Week	Data collection procedure	Participants
1	Questionnaire	N=204
2	Classroom observation	N=3 classes
3	Interview	N=12

3.4 Data analysis

The data were analyzed quantitatively and qualitatively. The quantitative analysis compiled descriptive statistics to obtain numerical summaries of the survey data to examine the percentages (%), mean values, and standard deviations (SD). The data obtained from the questionnaire were analyzed based on a five-point Likert scale, and the scores of negatively worded items were reversed, as shown in Table 7. Then, the mean scores in the Likert scales were calculated and interpreted using Likert's criteria (1932) (see Table 8). The Statistical Packages in Social Sciences (SPSS) Version 25.0 and Microsoft Excel 2010 were used to quantitatively analyze the descriptive statistics of each question from the questionnaire.

Table 7: Scoring for the questionnaire items

Items	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
Positive	5	4	3	2	1
Negative	1	2	3	4	5

Table 8: Interpretation of mean scores for the questionnaire items

Positive Items		**Negative Items**	
Mean	**Level**	**Mean**	**Level**
4.51-5.00	Very high	4.51-5.00	Very low
3.51-4.50	High	3.51-4.50	Low
2.51-3.50	Moderate	2.51-3.50	Moderate
1.51-2.50	Low	1.51-2.50	High
1.00-1.50	Very low	1.00-1.50	Very high

Table 8 illustrated the mean scores from the Likert scales. For positive items, scores in the 3.51-4.50 and 4.51-5.00 range indicate high and very high agreement, respectively, suggesting that the participants hold positive attitudes towards EMI. Scores between 2.51-3.50 reflect the moderate agreement, meaning that participants feel neutral or unsure of the statements. Finally, scores in the range of 1.00-1.50 and 1.51-2.50 show low and very low levels of agreement, respectively, which means that the participants hold negative attitudes towards EMI. This scoring scale is reversed for the negative statements, as shown in Table 7 (Likert, 1932; Srisa-ard, 2003).

A qualitative analysis was used for the classroom observation and interview data by transcribing, coding, and interpreting the data to derive any emerging themes for discussion (Huang, 2015). Descriptive analysis was also used for the classroom observation data, and the interview data were analyzed using qualitative content analysis to identify major themes.

3.5 Results of the pilot study

To assess the reliability and validity of the study, a pilot study was conducted in English with 63 learners (see Table 9) who did not participate in the main study. The Cronbach's Alpha coefficient was 0.955, indicating excellent internal consistency (George & Mallery, 2003). The pilot study aimed to assess the duration required for participants to complete the question, to ensure that all questions and instruments are well-defined, to confirm that the responses address the intent of the questions, and to address any problems or confusion.

Table 9: Participants in the pilot study (N = 63)

Country	China	Bangladesh	Brunei	Cambodia	Vietnam
N	54	2	2	3	2
Total			63		

As shown in Table 9, the pilot study was conducted through a survey administered to 63 overseas learners (33 male, 30 female) studying in different departments from various faculties at a tertiary level (undergraduate and postgraduate). Out of the total sample, 10 (16%) were Bachelor students, 10 (16%) Master students, and 43 (68%) Doctoral students. All the participants, from 5 different national backgrounds, studied in a Thai university within the music, art, business, and education fields.

Table 10 shows the summary descriptive statistics for learners' attitudes towards EMI, as well as the perceived opportunities and challenges related to EMI. The average mean for the participants' attitudes towards EMI was 3.26 (65.2%), which indicated that participants had moderate positive attitudes towards EMI. The mean score for learners' perceived challenges was 2.83 (56.6%), suggesting that participants felt uncertain of the potential negative results associated with EMI. In response to participants' perceived opportunities, the result showed that they agreed (77.2%) that EMI was beneficial to their learning practice (M= 3.86).

Table 10: Descriptive statistics of the pilot test (N = 63)

Category	Mean	%	SD	Level
Total Attitudes (10 items)	3.26	65.2	.65	Moderate
Total Perceived Opportunities (10 items)	3.86	77.2	.83	High
Total Perceived Challenges (10 items)	2.83	56.6	.81	Moderate

According to the Critical Values of Pearson Product Moment Correlation Coefficient, the critical value, with (n - 2) degrees of freedom, was 0.210 at $\alpha = 0.05$ significance level (n = 63). The Corrected Item-Total Correlation for all items was not significant (> 0.210), which indicates that the items do not need to be further improved.

In conclusion, the results in the pilot study revealed that items in the questionnaire have an excellent level of internal consistency and validity and meet the requirements of the main research study.

3.6 Summary

This chapter outlines the methodology of the current study, including the participants and setting, research instruments, data collection procedures, data analysis and the results of the pilot study. The next chapter will present the results of the current study. A summary of the procedure for the current study is shown in Figure 3.

Phase	Procedure	Product
1. Pilot study	● N = 63 ● Examine reliability ● Examine content validity ● SPSS software	● Data collection instruments
2. Quantitative Analysis	● N = 204 ● Distribution and collection of questionnaires via e-mails ● SPSS software (related statistical methods)	● Quantitative results
3. Qualitative Analysis	● 2 open-ended questions ● N = 3 classes (Classroom observation) ● N = 12 (Interview) ● Descriptive analysis ● Qualitative content analysis	● Qualitative results

Figure 3: Visual table of the procedure for the current study

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CHAPTER IV
RESULTS

This chapter provides the results related to learners' attitudes and their perceived opportunities and challenges regarding EMI in a Thai university.

4.1 Quantitative results

The demographic information indicated that all 204 participants reported that the English language was used in the textbooks, exams, lecture notes, PowerPoint slides and other learning materials posted by the lecturers. Moreover, most participants (78%) answered that the lecturers in those EMI programs primarily used English to deliver the subject content, and sometimes switched to Thai to better express or illustrate disciplinary concepts or meanings.

In the second part of the questionnaire, the overall results from the five-point Likert scale questions (see Table 11) showed that learners' attitudes towards EMI were positive, as indicated by the overall mean value of 3.93 (78.6%), which falls in the high agreement range of 3.51-4.50. Similarly, respondents agreed (83.2%) that using English as a medium of instruction provided them with opportunities (M = 4.16). The overall mean for the items related to EMI challenges was 3.69 (59.6% agreement), suggesting that the participants felt unsure about the potential negative consequences of EMI.

Table 11: Overall mean scores from the Likert scale items

Category	Mean	%	SD	Level
Attitudes	3.93	78.6	.46	High
Opportunities	4.16	83.2	.55	High
Challenges	2.98	59.6	.74	Moderate
Total	3.69	73.8	.48	High

4.1.1 Learners' attitudes towards English as a medium of instruction

Out of the ten items in the questionnaire, items 1, 3, 5, 6, and 7 were categorized as positive statements, whereas items 2, 4, 8, 9, and 10 were negative statements (marked by * in Table 12). The analysis of the results revealed that respondents' attitudes towards EMI were positive (M = 3.93), which falls in the high range (3.51-4.50). Indeed, participants agreed with most of the statements in the questionnaire (overall mean = 78.6%).

As shown in Table 12, 92.65% (75.49% from strongly agree level and 17.16% from agree level) of the Thai learners would like to use English in their future career (item 6), and 91.67% (50.98% from strongly agree level and 40.69% from agree level) enjoyed learning in the English language (item 1). This showed that the majority of participants had a very positive attitude towards using and learning in English. Moreover, the mean scores for negatively worded items 8 & 10 were 4.00 (80.0%) and 4.48 (89.6%), respectively, which suggests that participants were interested in the activities provided by lecturers in EMI programs and they believed that EMI was necessary for their study.

Table 12: Learners' attitudes towards EMI

Statements	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)	Mean (%)	SD	Level
1. I enjoy learning in the English language.	104 (50.98)	83 (40.69)	17 (8.33)	0 (0)	0 (0)	4.43 (88.6)	.64	High
2. I feel stressed to learn subject content in English.*	10 (4.90)	42 (20.59)	83 (40.69)	46 (22.55)	23 (11.27)	3.15 (63.0)	1.03	Moderate
3. I feel comfortable learning with both English and Thai instruction.	93 (45.59)	58 (28.43)	50 (24.51)	2 (0.98)	1 (0.49)	4.18 (83.6)	.87	High
4. It is difficult for me to follow my teachers.*	10 (4.90)	51 (25.00)	94 (46.08)	40 (19.61)	9 (4.41)	2.94 (58.8)	.91	Moderate
5. I gain more respect by studying in English.	42 (20.59)	83 (40.69)	68 (33.33)	11 (5.39)	0 (0)	3.76 (75.2)	.84	High
6. I'd like to use English in my future career.	154 (75.49)	35 (17.16)	15 (7.35)	0 (0)	0 (0)	4.68 (93.6)	.61	Very high
7. Teachers' use of English to teach the subject content motivates me in my future career.	110 (53.92)	70 (34.31)	23 (11.27)	1 (0.49)	0 (0)	4.42 (88.4)	.71	High
8. I lose interest in classroom activities that are conducted in English.*	4 (1.96)	20 (9.80)	31 (15.20)	67 (32.84)	82 (40.20)	4.00 (80.0)	1.06	Low
9. I am afraid to speak English in class.*	13 (6.37)	39 (19.12)	70 (34.31)	42 (20.59)	40 (19.61)	3.28 (65.6)	1.17	Moderate
10. I feel that using English to teach the subject content is not necessary.*	1 (0.49)	9 (4.41)	13 (6.37)	50 (24.51)	131 (64.22)	4.48 (89.6)	.84	Low
Overall						**3.93 (78.6)**	**.46**	**High**

4.1.2 Opportunities offered by EMI

Overall, respondents agreed (M = 4.16) that using English as a medium of instruction provided them with opportunities in language development as well as a future career in international programs. As shown in Table 13, the item related to the improvement of learners' English communication skills (item 11) received the highest mean score (M = 4.63), followed by item 20, which related to higher salary preparation (M = 4.45), and item 19 related to their future study abroad (M = 4.40). These results indicate that the participants believed that EMI (1) raised their level of language proficiency, (2) improved their future salary prospects, and (3) provided learning opportunities abroad.

Table 13: Opportunities offered by EMI

Statements	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)	Mean (%)	SD	Level
11. Teachers use English to teach the subject content helps improve my English communication skills.	140 (68.63)	53 (25.98)	10 (4.90)	1 (0.49)	0 (0)	4.63 (92.6)	.60	Very high
12. Teachers use English to teach the subject content builds up my confidence in speaking English.	107 (52.45)	66 (32.35)	29 (14.22)	2 (0.98)	0 (0)	4.36 (87.2)	.76	High
13. I feel more comfortable to read in English.	62 (30.39)	72 (35.29)	67 (32.84)	3 (1.47)	0 (0)	3.95 (79.0)	.83	High
14. Teachers use English to teach the subject content improves my English writing ability.	85 (41.67)	87 (42.65)	28 (13.73)	3 (1.47)	1 (0.49)	4.24 (84.8)	.78	High
15. My listening ability improves by studying in English.	93 (45.59)	77 (37.75)	33 (16.18)	1 (0.49)	0 (0)	4.28 (85.6)	.75	High
16. I can use English to make more foreign friends in class.	57 (27.94)	54 (26.47)	56 (27.45)	25 (12.25)	12 (5.88)	3.58 (71.6)	1.19	High
17. Teachers use English to teach the subject content prepares me for international journal publications.	44 (21.57)	52 (25.49)	81 (39.71)	22 (10.78)	5 (2.45)	3.53 (70.6)	1.02	High
18. Teachers use English to teach the subject content prepares me for a more promising career.	84 (41.18)	84 (41.18)	34 (16.67)	2 (0.98)	0 (0)	4.23 (84.6)	.76	High
19. Teachers use English to teach the subject content gives me a better chance to continue my study overseas.	107 (52.45)	72 (35.29)	24 (11.76)	1 (0.49)	0 (0)	4.40 (88.0)	.71	High
20. Teachers use English to teach the subject content prepares me for higher salary.	112 (54.90)	74 (36.27)	15 (7.35)	3 (1.47)	0 (0)	4.45 (89.0)	.70	High
Overall						**4.16 (83.2)**	**.55**	**High**

4.1.3 Challenges associated with EMI

The questionnaire included 10 negatively worded statements (marked by * in Table 14) that addressed the challenges faced by Thai university learners when the instructors used EMI. Overall, the participants reported an average score of 59.6% agreement with these statements, indicating a moderate level of agreement. As shown in Table 14, many participants (81.37%) found it challenging to pay the higher tuition fees associated with EMI (M = 1.67). Furthermore, although over 30% of participants held neutral attitudes towards most of the challenges associated with EMI (except item 30), 56.37% disagreed that using English as a medium of instruction was distracting (item 29). These results suggest that participants felt comfortable with mixed instructions (English and Thai) in class, and the most pressing concern was related to economic burdens.

Table 14: Challenges associated with EMI

Statements	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)	Mean (%)	SD	Level
21. Teachers use English to teach the subject content hinders my understanding of the subject content. *	14 (6.86)	47 (23.04)	91 (44.61)	36 (17.65)	16 (7.84)	2.97 (59.4)	1.00	Moderate
22. Speaking with my poor accent in class is a challenge for me. *	9 (4.41)	28 (13.73)	65 (31.86)	56 (27.45)	46 (22.55)	3.50 (70.0)	1.12	Moderate
23. I am afraid to make grammatical mistakes. *	45 (22.06)	51 (25.00)	64 (31.37)	25 (12.25)	19 (9.31)	2.62 (52.4)	1.22	Moderate
24. I avoid expressing opinions in English in class. *	16 (7.84)	43 (21.08)	73 (35.78)	39 (19.12)	33 (16.18)	3.15 (63.0)	1.16	Moderate
25. I am afraid to verify my doubts in English in class. *	18 (8.82)	32 (15.69)	68 (33.33)	56 (27.45)	30 (14.71)	3.24 (64.8)	1.15	Moderate
26. It is difficult to participate in classroom discussions in English. *	16 (7.84)	44 (21.57)	82 (40.20)	38 (18.63)	24 (11.76)	3.05 (61.0)	1.09	Moderate
27. Doing the assignments in English is a challenge for me. *	12 (5.88)	20 (9.80)	99 (48.53)	38 (18.63)	35 (17.16)	3.31 (66.2)	1.06	Moderate
28. It takes me longer time to read textbooks in English. *	31 (15.20)	52 (25.49)	82 (40.20)	28 (13.73)	11 (5.39)	2.69 (53.8)	1.06	Moderate
29. It is difficult for me to stay focused on the lesson when taught in English. *	5 (2.45)	17 (8.33)	67 (32.84)	69 (33.82)	46 (22.55)	3.66 (73.2)	1.00	Low
30. I have to pay higher tuition fees. *	124 (60.78)	42 (20.59)	24 (11.76)	10 (4.90)	4 (1.96)	1.67 (33.4)	1.00	High
Overall						**2.98 (59.6)**	**.74**	**Moderate**

4.2 Qualitative results

To better understands learners' attitudes, the opportunities and challenges that associated with EMI, the qualitative data from open-ended questions, classroom observation and interview were analyzed and coded into conceptual themes, including attitudes, perceived opportunities and challenges, as detailed in the following sections.

4.2.1 Learners' attitudes towards English as a medium of instruction

The analysis of the qualitative findings showed that Thai university participants had a positive attitude toward EMI. More specifically, all participants reported that it was necessary to use English as a medium of instruction at higher education in Thailand. Participants also believed that EMI could improve their overall language proficiency. Table 15 shows extracts from the semi-structured interviews.

Table 15: Qualitative analysis of learners' attitudes towards EMI

Participant	Statements
Bonita	I love English. That's why I decide to study in the English program. It's useful and necessary.
Cream	Using English to learn subject contents is required nowadays. English can be noticed everywhere. It reveals that English is vital and needed, especially for our university learners.
Denis	I am really proud to learn the subject content in English. It is international.
John	English should be the medium of instruction in university courses, I mean, at least in some courses like international business, international tourism.
Lara	I've got some new experience of using English by applying it in the subjects. For me, it's fun and challenging.
Mia	I think using English to learn university subjects is needed.
Myra	I like to study in the English language because learning in the English language helps me improve my English skills.
Nam	We need to improve our English communication skills in the future career. EMI can provide us with lots of opportunities to practice our general English proficiency because we use English in everyday study.
Patrick	Using English to teach subject content increased the exposure to the English language, which is good for my English improvement.
Peter	I agree with using English to teach subject contents. You know, in university education, it is a powerful tool to strengthen one's ability to take lessons in English.
Toey	The generation now is a lot more used to English, academic study, job hunting, and so on. It shows that learning in English program is required for our generation.
Wendy	Although I feel difficult to speak English fluently, I like to attend these courses conducted in the English language. Practice makes perfect. If I listen to English every day in every class, my English will get improved. English is essential and useful for higher education.

4.2.2 Opportunities offered by EMI

The analysis of the open-ended questions and interview data revealed that the participants perceived that EMI programs provided both personal and external opportunities. The personal opportunities of EMI can be categorized into three aspects: enhancing English competence, building self-confidence in using English, and preparing for a future career. The participants also identified external opportunities at the institutional level, including the opportunities of EMI to attract international learners and to send local learners abroad for study. Table 16 illustrates some of the interview extracts related to the opportunities provided by EMI programs.

Table 16: Qualitative analysis of the opportunities offered by EMI

Participant	Statements
Bonita	It is practical to learn subject knowledge in the English language. It benefits me with my language proficiency while learning the subjects.
Cream	The main reason why I decided to study in this program is that I can go abroad for exchanging scholarships in the third and fourth year. It will provide me with more competitiveness for job opportunities in English-speaking countries in the future.
Denis	It makes me energetic and confident by using English to speak with my teachers and friends in and outside of the classroom.
John	I become more confident to speak with my friends in English in daily life.
Lara	After two years' study, I'm amazed by the improvement of my listening skills. Most of the time, I don't need to translate what I heard from English into Thai. This boosts my confidence a lot.
Mia	Since I learned all the subjects in Thai before I entered the university, it is a great opportunity for me to put the English language into practice in the English program.
Myra	English programs can provide opportunities to those who want to study in Thailand but cannot speak Thai.
Nam	The university realized the importance of this English program. More and more international learners from China, for example, study in our university. I believe that if our university keeps moving forward, there will be more international learners to come and study.
Patrick	Most of the technical terms in my field are from western countries, so it is easier to learn them in English.
Peter	I think learning or studying in the English language is an efficient way to improve my English skills.
Toey	Arguably the greatest advantage of EMI is that my career prospects and employment opportunities can vastly increase.
Wendy	Learning theories derived from English-speaking countries in English is much easier than that in Thai translation. Besides, learning in English will help me apply for exchange programs. I would experience advanced education in western developed countries, and it will also prepare me for admission to world-famous universities.

4.2.3 Challenges associated with EMI

The qualitative analysis on challenges associated with EMI showed that participants perceived both personal and external challenges. The personal challenges resulted from the qualities or abilities of the participants, including the participants' beliefs that their English competence was inadequate. These linguistic challenges mainly manifested in a lack of technical vocabulary and confidence. Specifically, participants tended to be more concerned about dealing with the difficult, field-specific vocabulary, which negatively affected their understanding of the lectures, as illustrated in Table 17. They also expressed that they were hesitant to use English to communicate because of their insufficient spoken English proficiency. The external challenges related to the selection and management of lecturers. That is, Thai university learners in this study questioned the qualification of some teachers in EMI programs and expressed that some teachers had low English competence and ineffective teaching skills. As shown in Table 17, learners did feel uncertain about the efficacy of some courses in EMI programs. They raised concerns about how the teaching materials, instructors and approaches could be better managed to generate more effective learning situations.

Table 17: Qualitative analysis of the challenges associated with EMI

Participant	Statements
Bonita	Some words are very specific; it is not easy to understand and remember them.
Cream	Sometimes I cannot understand the jargon right away, and many specific words make it difficult for me to read.
Denis	There are few classroom activities for us to practice our speaking and communication skills in class. Teachers always follow the textbooks and seldom provide us with more opportunities to do pair work or group work. This situation becomes even much worse when it comes to online teaching.
John	The words in the textbooks are too hard to understand. This new vocabulary is always a problem for me to study.
Lara	We don't have native or foreign teachers/ friends, and we don't have a chance to use English outside of the class. It is tough work to practice our spoken English skills.
Mia	Perhaps some of the subjects learned in English are not helpful. These subjects should not be taught in English, such as laws. There is a lot of specific vocabulary in them.
Myra	Teachers speak so fast; it is difficult to catch up and understand.
Nam	It is quite hard to explain, and it is complicated to understand the content knowledge.
Patrick	Lacking confidence is the main concern for me. I care too much about grammar because I am afraid of making mistakes in English communications.
Peter	It takes me a lot of time to look up the dictionary for the meanings of the jargon and remember them. They are difficult to understand. They affect my understanding of the content.
Toey	Some teachers are not capable of teaching in the English language. Sometimes they use Thai more than English in lectures.
Wendy	I am afraid of being teased by my friends when they point out my mistakes. And I am also concerned about the stress of the words because I don't want my accent to be too Thai style. I envy the learners majoring in English for International Communication because they have a foreign teacher from India to improve their spoken English.

4.2.4 Classroom observation

The qualitative analysis of classroom observation was based on Lara-Alecio and Parker's (1994) pedagogical model to effectively capture the teacher-learner interactions in EMI programs. The observation of the three selected classes indicated that these classes were conducted along fairly traditional lecture-style lines, where learners were required to listen to the lecture, to write notes, and sometimes to answer the lecturer's questions. The English used by the lecturers was fluent, accurate, and comprehensible to most of the learners. The only Thai spoken by the lecturers were very short phrases to call the roll, to elicit responses, to socialize, to enliven the classroom, or to encourage the learners to make more effort: for example, *ยังอยู่กันมั้ย ออกกันไปหมดละหรอ* (Are you still with me? Did you all go out?), *ฉันสามารถไปข้างหลัง/ฉันไปข้างหลังก็ได* (I can go to the back.), *วันนี้เป็นยังไงบ้าง เหนื่อยหรือยัง อดทนอีกนิดนะ จะปิดเทอมแล้ว* (How is it going

today? Are you all tired? Just hang in there. Semester break is just around the corner.), *โห ดูง่วงกันจัง เดี๋ยวครูสุ่มเลขที่ตอบคำถามดีกว่า จะได้ตื่นเต้น* (Oh my...you all seem so sleepy. I will randomly pick a student number to answer my question. It will be exciting!).

The lectures that were observed predominately relied on a teacher-centered approach. The results showed that teacher talk (TT) played a dominant role in teacher/learner interactions in the observed classroom, and the quantity of TT greatly surpassed learner talk (LT). For instance, one of the lecturers talked almost uninterruptedly for the entire fifty minutes of the class and did not seek to interact with the learners, other than asking if they understood and then not allowing any time for a response before providing the answers to the questions. Overall, very little interaction was observed between the learners and the lecturer in the three lectures.

In addition, display questions were used by the lecturers more frequently than referential questions. In most observed classes, lecturers raised questions that only required a single or short response from the learners. That is, learners were passive learning and had little freedom to think actively and express their own opinions based on their own understanding.

As for the learners' reactions, most of the learners seemed to be paying attention. The learners looked at the lecturers or PowerPoint slides and listened attentively; some made notes and/or referred to their smartphones or iPad or laptop on which they had downloaded the relevant PowerPoint slides. However, there was evidence to suggest that some of the learners might not have understood the concepts explained by the lecturers; some learners showed blank expressions, murmured to their peers, or sent text messages during class. Moreover, learners only occasionally asked questions during class and most learners were too shy to speak during the class. Indeed, the learners were more likely to use their L1 (Thai) to ask questions. Furthermore, Thai was also widely used during group interactions in the observed lectures.

4.3 Chapter summary

In summary, the results in the present study revealed that Thai university learners held positive attitudes towards EMI. The participants in this study were convinced that the EMI was necessary for Thai higher education and opened opportunities related to their future career and their language proficiency. They were keen to learn the English language and to participate in classroom activities in EMI programs. The Thai university learners also identified both personal and external factors related to the challenges and opportunities associated with EMI. The personal opportunities included linguistic knowledge and job prospects, whereas the external opportunities related to institutional aspects, including studying abroad opportunities and attracting more international learners to enhance the reputation of the university. The personal challenges included the high tuition fees associated with EMI programs, which would increase financial burdens and learners' English language difficulties that hindered their understanding of the content. The learners also identified external challenges related to both the institutions and the teachers. Indeed, the learners expressed concerns about the effectiveness of the courses in EMI programs.

CHAPTER V
DISCUSSIONS AND CONCLUSION

This chapter will discuss the research findings of the current study. These results will contribute to a better understanding of the attitudes, opportunities and challenges associated with EMI in the international program for Thai learners. This chapter also outlines the contributions of this research to English language learning research. The limitations and future research directions are also included in this chapter.

5.1 Learners' attitudes towards EMI in Thai university

Overall, the quantitative data analysis showed that the participants held positive attitudes towards EMI. The majority of participants (91.67%) in the quantitative analysis strongly agreed that they enjoyed learning in the English language. The qualitative data analysis also revealed a positive attitude towards the EMI program. These findings are consistent with previous studies showing that university learners' attitudes towards EMI were positive (Collins, 2010; Dearden, 2014; Ghani, 2018; Islam, 2013; Lasagabaster, 2011; Rogier, 2012; Seikkula-Leino, 2007; Sultan, Borland & Eckersley, 2012; Çağatay, 2019). The participants also noted that they wished to learn in English as they would likely need the English language in their future careers. Indeed, previous studies have reported that EMI supported learners' future careers in the global market (Islam, 2013; Lasagabaster, 2011).

Learners also noted that English was necessary to teach the subject content at higher education institutions in Thailand. The finding is consistent with previous studies that English was adopted as a medium of instruction at the university level to highlight the power of the language in academia and the internationalization policy (Chen & Kraklow, 2014; Cho, 2012). Indeed, EMI is needed in some subjects due to the nature of courses. That is, some courses are considered "international" (like tourism, business and international communication) and therefore should be taught in English. The following excerpts from the qualitative analysis illustrate the necessity of EMI for Thai university learners:

> "English should be the medium of instruction in university courses, I mean, at least in some courses like international business, international tourism" (John).
>
> "I agree with using English to teach subject contents. You know, in university education, it is a powerful tool to strengthen one's ability to take lessons in English" (Peter).
>
> "I think using English to learn university subjects is needed" (Mia).

The positive attitudes towards EMI also resulted from the learners' perceived improvement of their overall English language proficiency. Other studies have also reported that EMI facilitated English learning (Rogier, 2012; Sultan, Borland & Eckersley, 2012; Yang, 2015). Participants in the EMI programs learned and dealt with their subject knowledge in English, which benefited their English communication in all four skills (speaking, listening, reading, and writing). The development of the participants' English ability is highlighted in the following responses to EMI opportunities:

> "EMI can provide us lots of opportunities to practice our general English proficiency because we use English in everyday study" (Nam).
>
> "Using English to teach subject content increased the exposure to the English language, which is good for my English improvement" (Patrick).

As previously demonstrated (Lasagabaster, 2011; Seikkula-Leino, 2007), the current study found that EMI increased learning motivation. This could be because EMI offered opportunities for learners to gain exposure to cross-cultural experiences. Learners were able to share different cultures, traditions and languages with peers from various nations. Finally, the participants' interests in classroom activities in EMI programs also contributed to their positive attitudes towards EMI. This is partly because their learning motivation was increased, which, in turn, had positive effects on their evaluation of the classroom activities.

To summarize, this study demonstrated that Thai undergraduate learners had affirmative and positive attitudes towards EMI. Participants enjoyed learning in the English language as well as the classroom activities provided in EMI programs. They also expressed the necessity of EMI in higher education and stated that they would make use of English in their future careers.

5.2 The opportunities offered by EMI according to Thai university learners

The current study revealed that EMI offered five important opportunities that could be divided into two components: personal and external opportunities. The personal opportunities identified were language skills, self-confidence, and career prospects, whereas the external opportunities occurred at an institutional level and included attracting international learners and sending local learners abroad for study. Figure 4 illustrates the opportunities perceived by Thai university learners.

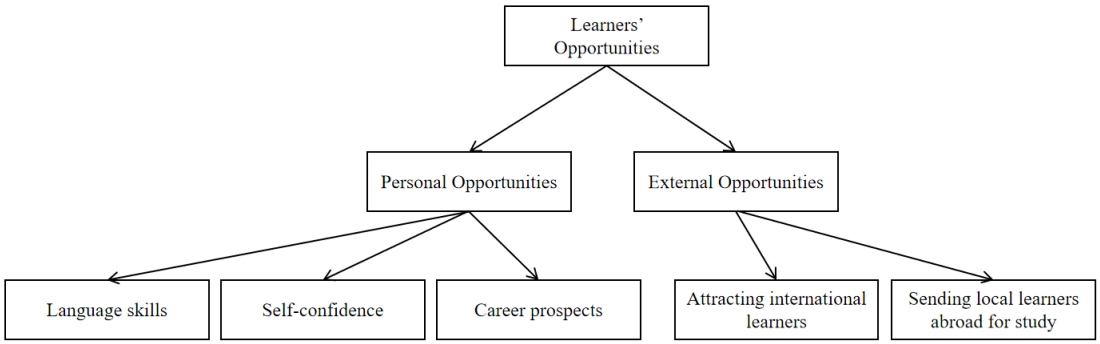


Figure 4: Thai university learners' opportunities

The personal opportunity to improve linguistic competence is likely linked to the use of extensive reading of English textbooks and related English learning materials posted by the lecturers (including the lecture notes, PowerPoint slides and other learning materials). Moreover, the learners' English communication skills, particularly in speaking and listening, were developed by the teacher-learner and peer interactions in EMI programs. The learners' English writing ability was also improved by the writing assignments distributed by teachers. The quantitative analysis confirmed that participants strongly agreed that EMI improved their English communication skills in speaking, listening, writing, and reading, respectively. This is consistent with previous studies showing that EMI improved learners' English abilities (Rogier, 2012; Sultan, Borland & Eckersley, 2012; Yang, 2015), and learners' receptive linguistic skills were positively correlated with an improvement in their productive English competence (Yang, 2015). However, others have reported a different pattern of improvement in communication skills with speaking being the most improved skill, followed by reading, writing and then listening (Rogier, 2012).

The following excerpts from the qualitative analysis illustrate that the participants believed that EMI improved their English language skills:

> "I think learning or studying in the English language is an efficient way to improve my English skills" (Peter).
>
> "Since I learned all the subjects in Thai before I entered the university. It is a great opportunity for me to put the English language into practice in the English program" (Mia).

Another personal opportunity that the participants identified was that EMI boosted their self-confidence in using English, as previously reported (Ghani, 2018). EMI helped develop learners' confidence because they had successfully completed their university subjects, which were fully delivered in English as a medium of instruction. Their communication skills were also facilitated by using English both in and outside of the classroom, which also fostered their confidence in using English. The excerpts below support this claim:

> "I become more confident to speak with my friends in English in daily life" (John).
>
> "It makes me energetic and confident by using English to speak with my teachers and friends in and outside of the classroom" (Denis).
>
> "… This boosts my confidence a lot" (Lara)

EMI also helped reinforce participants' competitiveness in the job market. The quantitative and qualitative analysis results provided evidence that EMI prepared Thai university learners for promising careers with higher salaries. Previous studies have also illustrated the gain in vocational benefits that EMI programs offered (Hengsadeekul et al., 2010; Islam, 2013). The following statement from a participant, Toey, supports this finding:

> "Arguably, the greatest advantage of EMI is that my career prospects and employment opportunities can vastly increase."

As for external opportunities, the findings showed that EMI helped attract overseas learners to Thai institutions. Since EMI provided all courses in the English language, this would accommodate learners who wished to learn in English. A previous study also identified this institutional opportunity (Chen & Kraklow, 2014). Thus, EMI can improve academic mobility through the exchange of ideas and thoughts and can

encourage better relations among learners of different nationalities. This is supported by the statements below:

> "The university realized the importance of this English program. More and more international learners from China, for example, study in our university. I believe that if our university keeps moving forward, there will be more international learners to come and study" (Nam).

> "English programs can provide opportunities to those who want to study in Thailand but cannot speak Thai" (Myra).

The other external opportunity perceived by Thai university learners was that EMI facilitated local learners to study abroad in partner universities. English has become the academic lingua franca of several university programs. Using EMI increased learner exchanges for better academic experiences and competency in the job market, and promoted the university profile as well as the internationalization of higher education. These findings are in line with a previous study that one of the opportunities of EMI identified by learners was the integration into a global educational environment by way of participating in learner exchange programs and academic mobility (Zenkova & Khamitova, 2018). The excerpts below illustrate this claim:

> "… I can go abroad for exchanging with scholarships in the third and fourth year, it will provide me more competitiveness for the job opportunities in English-speaking countries in the future" (Cream).

> "Learning in English will help me apply for exchange programs. I would experience the advanced education in western developed countries, and it will also prepare me for admission to world-famous universities" (Wendy).

To summarize, this study showed that Thai learners perceived both personal and external opportunities in relation to the use of EMI in higher education. EMI facilitated learners' competence and competitiveness in English language skills, self-confidence, and job prospects. Moreover, EMI helped Thai universities attract overseas learners and send local learners abroad, which fostered academic mobility.

5.3 The challenges associated with EMI according to Thai university learners

As shown in Figure 5, the participants noted several challenges arising from EMI, including their low English proficiency, higher tuition fees as well as the selection and management of lecturers (Collins, 2010; Dearden, 2014; Zhao & Dixon, 2017).

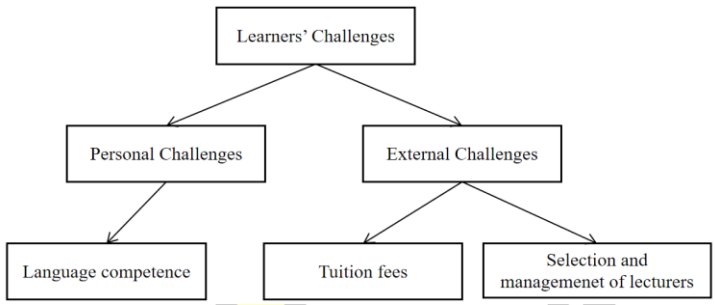


Figure 5: Thai university learners' challenges

While learners showed moderate attitudes towards the challenges in the quantitative findings, the qualitative results revealed that their perceived low English proficiency made them somewhat confused and frustrated in EMI classes. Indeed, the participants expressed that their weak English competence hindered their understanding of the content knowledge, which is defined as a "personal challenge" in the study. This caused them stress and hindered their participation in classroom discussions. The findings are congruent with former studies showing that insufficient language skills negatively affected the quality of subject learning in EMI programs (Klaassen & De Graaff's, 2001; Ibrahim, 2001; Joe & Lee, 2013; Zenkova & Khamitova, 2018; Wu, 2006; Chang, 2010; Huang, 2015; Islam, 2013; Hengsadeekul et al., 2010). The following excerpts highlight this challenge:

> "It is quite hard to explain, and it is complicated to understand the content knowledge" (Nam).
>
> "It takes me a lot of time to look up the dictionary for the meanings of the jargon and remember them. They are difficult to understand. They affect my understanding of the content" (Peter).
>
> "The words in the textbooks are too hard to understand. This new vocabulary is always a problem for me to study" (John).
>
> "Sometimes I am unable to understand the jargon right away, and there are a lot of specific words that make it difficult for me to read" (Cream).

Furthermore, the participants identified external challenges, which included the economic burdens resulting from the higher tuition fees and the ineffectiveness of some courses conducted by "unqualified" lecturers. The results from the quantitative analysis showed that a large number of participants (81.37%) reported that it was challenging to pay higher tuition fees in EMI programs. These fees are often higher than non-EMI programs as the lecturers typically have a higher level of education and EMI programs require more extensive curriculum development. Indeed, most Thai lecturers in the EMI programs considered in this study held doctoral degrees from English-speaking countries such as the UK, America, Canada, or Australia. Moreover, since English is used to teach specific knowledge, more effort is required to develop the courses to balance the content and language learning, which necessitates greater financial and time investments than using Thai as a medium of instruction. The findings are in agreement with a previous study that EMI might pose economic threats, such as increased tuition fees (Zenkova & Khamitova, 2018).

Thai university learners also had concerns about the qualification and management of lecturers in EMI programs. As shown in qualitative analysis, EMI lecturers had English competence but they may lack the pedagogic ability to effectively teach the disciplinary content as they must modify their input according to the learner's language proficiency (see also Dearden, 2014). The lecture-based learning approach also resulted in a lack of interaction in class, a challenge that has been previously identified (Ibrahim, 2001). To overcome these challenges, the institutions should launch detailed curricular advice, relevant support and professional development programs for EMI lecturers, and learner-centered and activity-based teaching methods should be introduced. The excerpts below illustrate the external threats related to lecturers:

> "Some teachers are not capable of teaching in the English language. Sometimes they use Thai more than English in lectures" (Toey).

> "There are few classroom activities for us to practice our speaking and communication skills in class. Teachers always follow the textbooks and seldom provide us with more opportunities to do pair work or group work. This situation becomes even much worse when it comes to online teaching" (Denis).

> "Teachers speak so fast, and it is difficult to catch up and understand" (Myra).

Overall, the Thai university learners identified several challenges related to EMI, including lack of language skills, tuition fees and ineffective lecturers. The inadequate English competence affected both the teaching and learning processes, which contributed to the ineffectiveness of EMI programs. Furthermore, the higher tuition fees associated with these programs can increase stress on the household economy.

5.4 Conclusion

The current study indicated that, overall, Thai university learners had a positive attitude towards EMI. Specifically, participants enjoyed learning in the English language and the classroom activities provided in EMI programs. Furthermore, from their point of view, EMI was necessary for higher education in order to improve their future career prospects. Concerning the learners' perceived opportunities, Thai learners in higher education reported that EMI facilitated their overall competence in English language skills, and improved their self-confidence and competitiveness in the job market. Moreover, EMI helped Thai universities to attract overseas learners and send local learners abroad, which would increase the mobility of learners and academic knowledge. Regarding challenges associated with EMI, the participants noted that the expensive tuition fees in EMI programs would increase the economic burden on the family. Moreover, a lack of English competence negatively affected both the teaching and learning processes.

The present results indicated that learners should improve their language proficiency to be more prepared for EMI programs. In addition, university administrators should make more efforts to balance the content and language in EMI programs. For example, they should provide detailed curricular advice and professional development programs for EMI lecturers. Finally, lecturers in EMI programs should implement well-planned instructional approaches and varied instructional models to promote learning motivation and learning effectiveness.

5.5 Pedagogical implications

The current study evinced the language belief related to the benefits of EMI, language management for developing the compatibility of the teachers and learners to adopt EMI, and the phenomenon of EMI implementation in the university context. The current study also showed multiple challenges for such a big portion of the participants at the higher education level. Besides that, the content teachers also experienced difficulties in conducting the classes by thoroughly implementing EMI. For pedagogical practice, universities of EFL contexts, including Thailand and China, should reinforce teacher education programs for the discipline content teachers. Teacher education programs need to incorporate EMI so that employed teachers can have training based on content teaching and how this teaching can be done through EMI. The process of simplifying didactic concepts should be informed to the EMI program lecturers. Besides, a certification program can be prearranged for the lecturers to certify them as EMI lecturers. In addition, General English or foundation courses and English for Academic Purposes (EAP) courses at higher education should entail the contents from the relevant fields. With this being designed, learners will encompass English reading, listening, speaking and writing skills. Learners would also have an opportunity to attain the registered vocabularies and ideas related to their discipline contents.

5.6 Limitations and suggestions for future studies

The current study investigated the attitudes, opportunities and challenges related to EMI, as reported by Thai learners in higher education. The data in this study was collected online only during the COVID-19 pandemic, which limited the distribution of the questionnaire to Thai university learners in EMI programs. As such, the number of participants was lower than anticipated. Therefore, future studies should ensure a greater number of respondents to better understand learners' attitudes towards EMI. Moreover, the current results only reflect the views of Thai learners from one university. Future studies may wish to include various educational contexts, including learners and lecturers from a wider range of study fields and institutions across different geographical areas of Thailand.

REFERENCES

REFERENCES

Ariffin, K., & Husin, S. M. (2011). Code-switching and code-mixing of English and Bahasa Malaysia in content-based classrooms: Frequency and attitudes. *Linguistics Journal, 5*(1), 220-247.

Baker, C. (2011). *Foundations of bilingual education and bilingualism* (5th ed.). Bristol, UK; Tonawanda, NY: Multilingual Matters.

Barnard, R., & McLellan, J. (Eds.). (2014). *Codeswitching in university English-medium Classes: Asian perspectives.* Bristol, England: Multilingual Matters.

Barnard, R. (2015). *EMI in Asian universities: Which model of English?* Paper presented at the colloquium English medium instruction: Researching a fast developing phenomenon at the international conference 'Faces of English', University of Hong Kong, Hong Kong, 11-13 June, 2015.

Barnard, R., & Hasim, Z. (Eds.). (2018). *English Medium Instruction Programmes: Perspectives from South East Asian Universities.* Routledge.

Belhiah, H., & Elhami, M. (2015). English as a medium of instruction in the Gulf: When students and teachers speak. *Language Policy*, *14*(1), 3-23.

Brinton, D. M., Snow, M. A., & Bingham, W. M. (1989). Suggestions for content-based materials development and adaptation Content-Based Second Language Instruction (pp. 89-95).

Çağatay, S. (2019). The Pros and Cons of English-medium Instruction in Higher Education in an EFL Context. *Journal of Foreign Language Education and Technology, 4*(2), 206-241.

Chang, Y. Y. (2010). English-medium instruction for subject courses in tertiary education: Reactions from Taiwanese undergraduate students. *Taiwan International ESP Journal*, *2*(1), 53-82.

Chen, Y. E., & Kraklow, D. (2014). Taiwanese college students' motivation and engagement for English learning in the context of internalization at home: A comparison of students in EMI and non-EMI programs. *Journal of studies in International Education,* 1-19.

Cho, D. W. (2012). English-medium instruction in the university context of Korea: Trade off between teaching outcomes and media-initiated university ranking. *Journal of Asia TEFL*, *9*(4).

Coleman, J., A. (2006). English Medium Instruction in European Higher Education. *Language Teaching*, 39, 1-14.

Collins, A. B. (2010). English-medium higher education: Dilemma and problems. *Eurasian Journal of Educational Research, 10*(39), 97-110.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.

Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and Language Integrated Learning.* UK: Cambridge University Press.

Crandall, J., & Tucker, G. R. (1990). Content-based instruction in second and foreign languages. In A. Padilla, H. H. Fairchild, & C. Valadez (Eds.), *Foreign language education: Issues and strategies* (pp. 83-96). Newbury Park, CA: SAGE Publications.

Curle, S., Yuksel, D., Soruç, A., & Altay, M. (2020). Predictors of English Medium Instruction academic success: English proficiency versus First language medium. *System*, 102378.

Dearden, J. (2014). *English as a medium of instruction-a growing global phenomenon.* British Council.

Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies.* Oxford, NY: Oxford University Press.

Ellili-Cherif, M., & Alkhateeb, H. (2015). College students' attitude toward the medium of instruction: Arabic versus English dilemma. *Universal Journal of Educational Research, 3*(3), 207-213.

Flick, U. (2006). *An introduction to qualitative research.* London: Sage.

Garza, T., M. Huerta, R. Lara-Alecio, B. J. Irby, and F. Tong. (2018). "Pedagogical Differences during a Science and Language Intervention for English Language Learners." *Journal of Educational Research, 111*(4), 487–496.

George, D., & Mallery, P. (2003). SPSS for Windows Step by Step. In *A Simple Guide and Reference*.

Ghani, N. F. B. C. (2018). Attitudes towards English medium instruction courses among second language learners in relation to learning anxiety and learning achievement. *SALTeL Journal (Southeast Asia Language Teaching and Learning)*, *1*(1), 38-47.

Hengsadeekul, C., Hengsadeekul, T., Koul, R., & Kaewkuekool, S. (2010). English as a medium of instruction in Thai universities: A review of literature. In *Selected Topics in Education and Educational Technology - 9th WSEAS International Conference on Education and Educational Technology, EDU'10* (pp. 89-94).

Hu, G., & Li, X. (2017). Asking and answering questions in English-medium instruction classrooms: What is the cognitive and syntactic complexity level? In J. Zhao & L. Q. Dixon (Eds.), *English medium instruction in Chinese universities: Perspectives, discourse and evaluation* (pp. 184-203). New York: Routledge.

Huang, D. F. (2015). Exploring and assessing effectiveness of English medium instruction courses: The students' perspectives. *Procedia-Social and Behavioral Sciences, 173*, 71-78.

Ibrahim, J. (2001). The implementation of EMI (English medium instruction) in Indonesian universities: Its opportunities, its threats, its problems, and its possible solutions. *K@ ta*, *3*(2), 121-138.

Islam, M. (2013). English medium instruction in the private universities in Bangladesh. *Indonesian Journal of Applied Linguistics, 3*(1), 126-137.

Jensen, C., Denver, L., Mees, I. M., & Werther, C. (2013). Students' attitudes to Lecturers' English in English-medium higher education in Denmark. *Nordic Journal of English Studies, 12*(1), 87-112.

Joe, Y., & Lee, H. K. (2013). Does English-medium instruction benefit students in EFL contexts? A case study of medical students in Korea. *The Asia-Pacific Education Researcher*, *22*(2), 201-207.

Kaur, A., Young, D., & Kirkpatrick, R. (2016). English education policy in Thailand: Why the poor results?. *In English language education policy in Asia* (pp. 345-361). Springer, Cham.

Kırkgöz, Y. (2009). Students' and lecturers' perceptions of the effectiveness of foreign language instruction in an English-medium university in Turkey. *Teaching in Higher Education, 14*(1), 81-93.

Klaassen, R. G., & De Graaff, E. (2001). Facing innovation: Preparing lecturers for English-medium instruction in a non-native context. *European Journal of Engineering Education, 26*(3), 281-289.

Krashen, S. (1992). The input hypothesis: An update. *Linguistics and language pedagogy:* The state of the art, 409-431.

Lara-Alecio, R., and R. Parker. (1994). "A Pedagogical Model for Transitional English Bilingual Classrooms." *Bilingual Research Journal, 18*(3–4), 119–133.

Lasagabaster, D. (2011). English achievement and student motivation in CLIL and EFL settings. *Innovation in Language Learning and Teaching, 5*(1), 3-18.

Likert, R. (1932). A technique for the measurement of attitudes. *Archives of psychology*.

Liu, S. (2009). *Globalization, higher education, and the nation state.* In Proceeding of the China Postgraduate Network Conference 23-24 April 2009, Luther King House, Manchester (pp. 91-100).

Macaro, E. (2018). *English Medium Instruction: Content and language in policy and practice.* Oxford, English: Oxford University Press.

Macaro, E., Curle, S., Pun, J., An, J., & Dearden, J. (2018). A systematic review of English medium instruction in higher education. *Language Teaching, 51*(1), 36-76.

Margić, B., & Žeželić, T. (2015). The implementation of English-medium instruction in Croatian higher education: Attitudes, expectations and concerns. In *English as a Scientific and Research Language, edited by* R. Plo Alanstrué, and C. Pérez-Llantada, 311-32.

MOE (2008), *Towards a Learning Society in Thailand: An introduction to Education in Thailand*, Ministry of Education of Thailand, Bangkok. Retrieved from www.bic.moe.go.th/newth/images/stories/book/edeng-series/intro- ed08.pdf.

MOET (2005). *Vietnam higher education renovation agenda: Period 2006-2020.* Hanoi, Vietnam: Ministry of Education and Training.

Morgado, M., & Coelho, M. (2013). CLIL vs English as the medium of instruction: The Portuguese higher education polytechnic context. *Egitania Sciencia* (12), 123 -145.

Murata, K. (2018). Exploring EMI in higher education from an ELF perspective: Introduction. In *English-medium instruction from an English as a lingua franca perspective* (pp. 1-3). Routledge.

NIETS (2015), O-NET : Ordinary National Educational Test, *NIETS*. Retrieved from www.niets.or.th/en/catalog/view/2211.

Nunan, D. (2003). The impact of English as a global language on educational policies and practices in the Asia Pacific region. *TESOL Quarterly, 37*(4), 595-596.

Rachakitjanubeksa. (1999). *The National Education Act 1999.*

Rogier, D. (2012). *The effects of English-medium instruction on language proficiency of students enrolled in higher education in the UAE*.

Rose, H., & Galloway, N. (2019). *Global Englishes for language teaching*. Cambridge University Press.

Rovinelli, R. J., & Hambleton, R. K. (1977). The use of content specialists in the assessment of criterion-referenced test item validity: 1977. *Dutch J Edu Res*.

Sah, P. K. (2020). English medium instruction in South Asian's multilingual schools: unpacking the dynamics of ideological orientations, policy/practices, and democratic questions. *International Journal of Bilingual Education and Bilingualism*, 1-14.

Salazar, M. S. (2015). The dilemma of combining positive and negative items in scales. *Psicothema*, *27*(2), 192-199.

Sameephet, B. (2020). *On the fluidity of languages: A way out of the dilemma in English medium instruction classrooms in Thailand* (Doctoral dissertation, The University of Waikato).

Satilmis, Y., Yakup, D., Selim, G., & Aybarsha, I. (2015). Teaching Concepts of Natural Sciences to Foreigners through Content-Based Instruction: The Adjunct Model. *English Language Teaching, 8*(3), 97-103.

Seikkula-Leino, J. (2007). CLIL Learning: Achievement levels and affective factors. *Language and Education, 21*(4), 328-341.

Sharma, Y. (2011). South Korea: Degrees taught in English to continue. *University World News, Issue 00468,* 26 July, 2011. Retrieved from www.universitiyworldnews.com/.

Snow, M. A., & Brinton, D. M. (1988). Content-based language instruction: Investigating the effectiveness of the adjunct model. *TESOL quarterly*, *22*(4), 553-574.

Soruç, A., & Griffiths, C. (2018). English as a medium of instruction: students' strategies. *Elt Journal*, *72*(1), 38-48.

Srisa-ard, B. (2003). Preliminary research. *The 8th Edition: Suwiriyasan Printing. Bangkok.*

Sultan, S., Borland, H., & Eckersley, B. (2012, July). English as medium of instruction (EMI) in Indonesia public junior secondary school: Students' language use, attitudes/motivation and foreign language outcomes. In *ACTA International TESOL Conference. Cairn Australia, Victoria University*.

Tachaiyaphum, N., & Sukying, A. (2017). EFL Pre-Service Teachers' Perceptions of CLIL. *Asian Education Studies, 2*(4), 44-56.

Tsui, A. B. M., and J. W. Tollefson. 2004. "The Centrality of Medium-of-Instruction Policy in Socio-political Processes." In *Medium of Instruction Policies: Which Agenda? Whose Agenda?* edited by J. W. Tollefson and A. B. M. Tsui, 1–27.

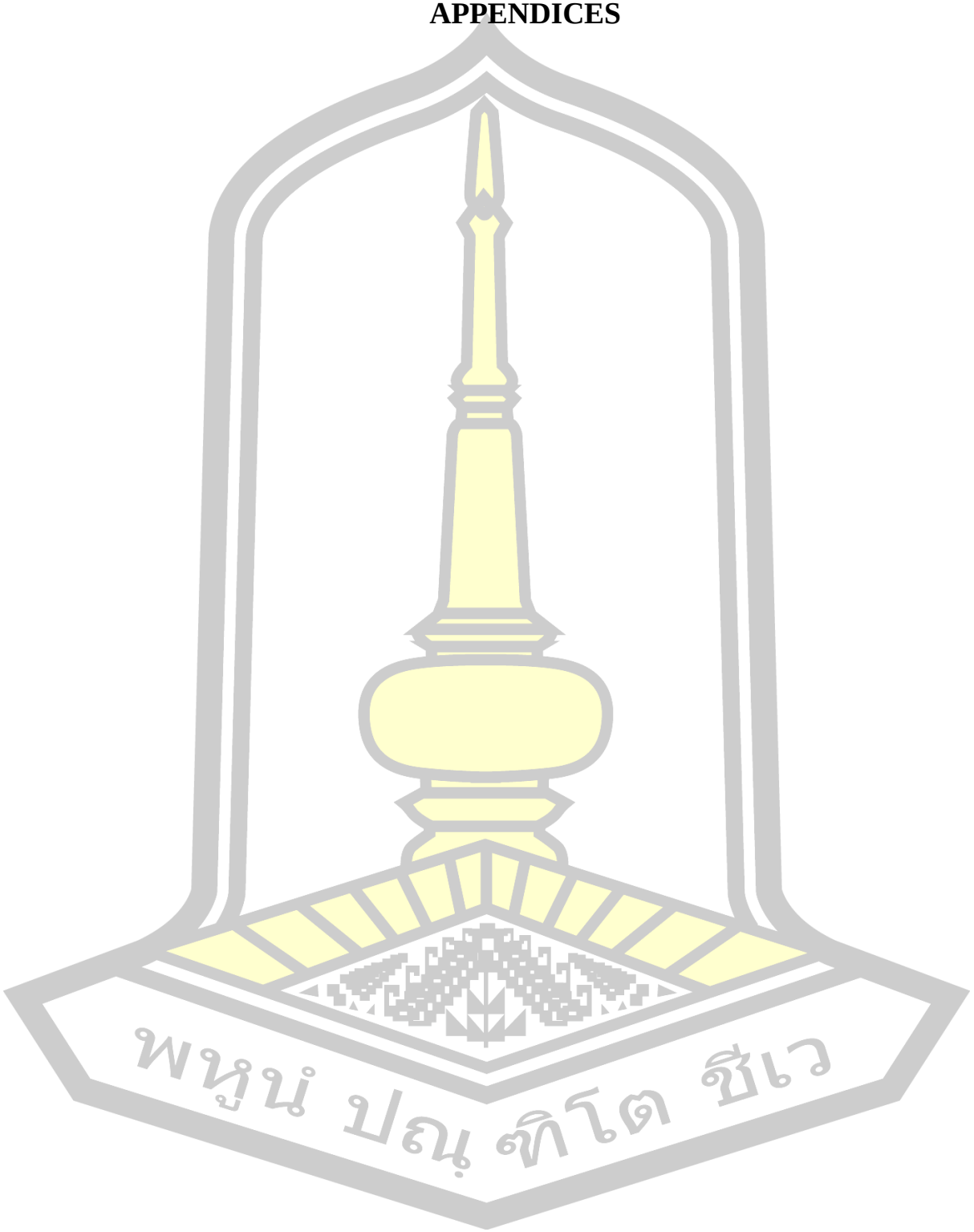
Wu, W. S. (2006). Students' attitudes toward EMI: Using Chung Hua University as an example. *教育暨外國語文學報*, (4), 67-84.

Yang, W. (2015). Content and language integrated learning next in Asia: Evidence of learners' achievement in CLIL education from a Taiwan tertiary degree programme. *International Journal of Bilingual Education and Bilingualism*, *18*(4), 361-382.

Zenkova, T., & Khamitova, G. (2018). English Medium-Instruction as a Way to Internationalization of Higher Education in Kazakhstan: An Opinion Survey in the Innovative University of Eurasia. *e-TEALS, 8*(1), 126-158.

Zhao, J., & Dixon, L. Q. (Eds.). (2017). *English-medium instruction in Chinese universities: Perspectives, discourse and evaluation.* Taylor & Francis.

APPENDICES



Appendix A

The Questionnaires

The questionnaires aim to explore the attitudes of the undergraduate learners' who enroll in EMI programs at a public university in Thailand. This research is designed to come to a common conclusion and to get a general idea. Participating in the survey study depends on a voluntary basis. Your responses, as well as your ideas, are really appreciated. Your responses will be evaluated only by the researcher and the data will be used in scientific publications. It takes approximately 10 minutes to finish answering the questions in the questionnaires. Your responses will definitely be kept confidential. Thank you very much for your participation.

The questionnaires consist of 3 parts as follow:

Part 1: Demographic information (11 items)

Part 2: The questions about learners' attitudes towards English Medium Instruction (30 items)

Part 3: Personal opinions (2 items)

PART 1: Demographic information

Instructions: Please tick (√) the option that best describes you or your case. You can fill in the blanks if necessary.

1. Gender: ❑Male ❑Female

2. Nationality: _____

3. Department: _____

4. Grade: ❑Freshmen ❑Sophomore ❑Junior ❑Senior

5. How long have you been learning English?

_____ year/s _____ month/s

6. Have you had oversea experiences? If yes, what the length of your stay?

❑Yes _____ year/s _____ month/s _____ day/s ❑No

7. What language is used in your class? If both, what percentage of each language takes place on average?

❑English ❑Thai ❑Both _____% English _____% Thai

8. What language is used in your course materials? If both, what percentage of each language takes place on average?

❑English ❑Thai ❑Both _____% English _____% Thai

9. What language is used in your exams? If both, what percentage of each language takes place on average?

❑English ❑Thai ❑Both _____% English _____% Thai

10. The recent English exam you took:

❑IELTS ❑TOEFL ❑O-NET ❑GAT ❑PAT ❑others_____

Your score: _____

11. Would you be interested in taking an interview in order to discuss your opinions?

❑Yes (Your name and contacts_____) ❑No

มหาวิทยาลัยราชภัฏ

PART 2: Learners' attitudes towards using English to teach the subject content

Instructions: Please read the statements below and mark the best alternative that best fits into your own opinion.

5: Strongly Agree **4:** Agree **3:** Neutral **2:** Disagree **1:** Strongly Disagree

Item	Learners' attitudes towards using English to teach the subject content	5	4	3	2	1
1	I enjoy learning in English language.					
2	I feel stressed to learn subject content in English.					
3	I feel comfortable learning with both English and Thai instruction.					
4	It is difficult for me to follow my teachers.					
5	I gain more respect by studying in English.					
6	I'd like to use English in my future career.					
7	Teachers' use of English to teach the subject content motivates me in my future career.					
8	I lose interest in classroom activities that are conducted in English.					
9	I am afraid to speak English in class.					
10	I feel that using English to teach the subject content is not necessary.					
Item	**Opportunities towards using English to teach the subject content**	**5**	**4**	**3**	**2**	**1**
11	Teachers use English to teach the subject content helps improve my English communication skills.					
12	Teachers use English to teach the subject content builds up my confidence in speaking English.					
13	I feel more comfortable reading in English.					
14	Teachers use English to teach the subject content improves my English writing ability.					
15	My listening ability improves by studying in English.					
16	I can use English to make more foreign friends in class.					
17	Teachers use English to teach the subject content prepares me for international journal publications.					
18	Teachers use English to teach the subject content prepares me for a more promising career.					
19	Teachers use English to teach the subject content gives me a better chance to continue my study overseas.					
20	Teachers use English to teach the subject content prepares me for a higher salary.					
Item	**Challenges about using English to teach the subject content**	**5**	**4**	**3**	**2**	**1**
21	Teachers use English to teach the subject content hinders my understanding of the subject content.					
22	Speaking with my poor accent in class is a challenge for me.					
23	I am afraid to make grammatical mistakes.					
24	I avoid expressing opinions in English in class.					
25	I am afraid to verify my doubts in English in class.					
26	It is difficult to participate in classroom discussions in English.					
27	Doing the assignments in English is a challenge for me.					
28	It takes me longer time to read textbooks in English.					
29	It is difficult for me to stay focused on the lesson when taught in English.					
30	I have to pay higher tuition fees.					

PART 3: Personal opinions

1. What are other opportunities of using English to teach the subject content apart from the items in Part 2?

_____

_____

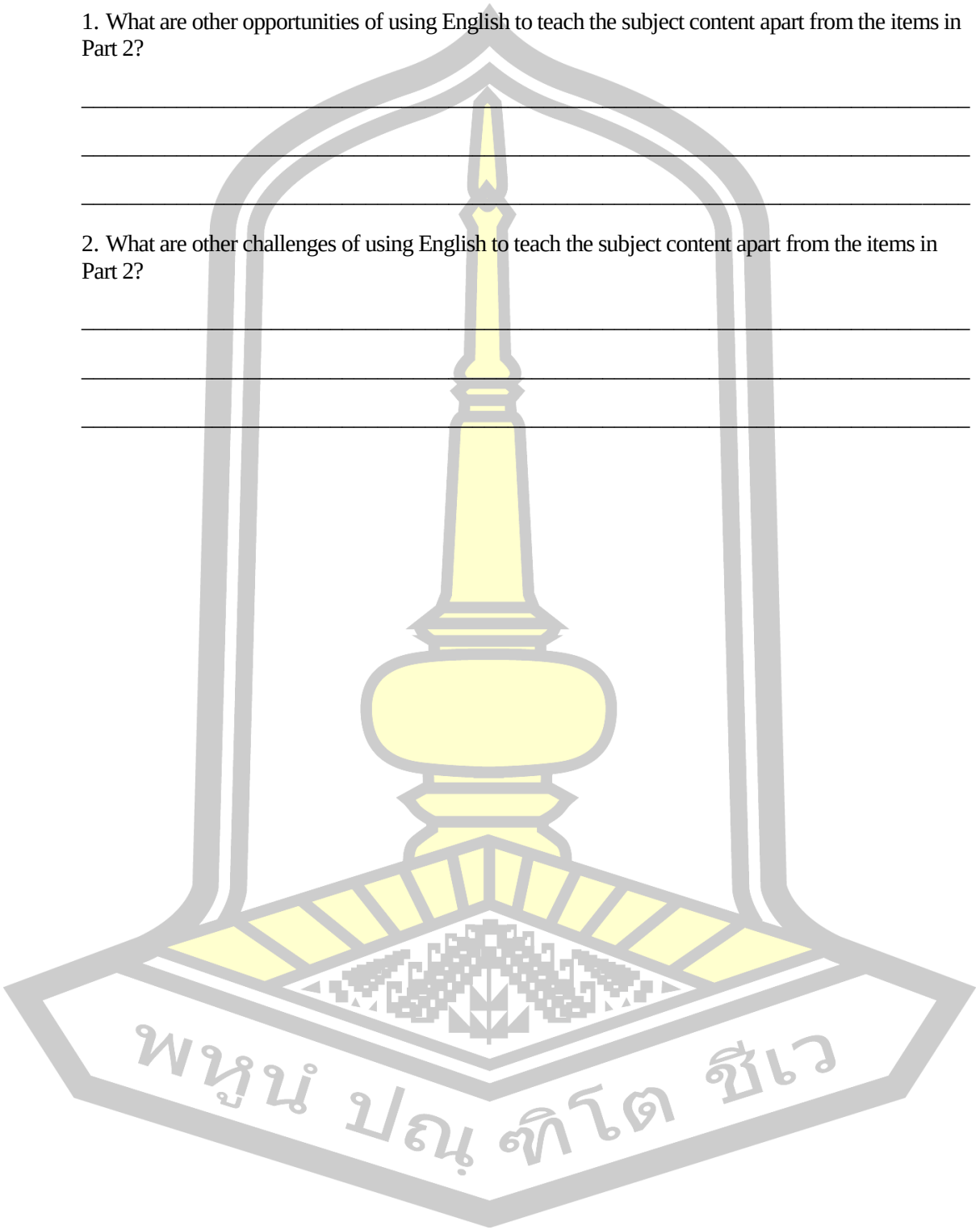
_____

2. What are other challenges of using English to teach the subject content apart from the items in Part 2?

_____

_____

_____



Appendix B

The Questionnaires (Thai Version)

แบบสอบถาม

ส่วนที่ 1 ข้อมูลด้านประชากรศาสตร์

คำชี้แจง: กรุณาทำเครื่องหมาย(√)ในข้อที่ตรงกับตัวท่านมากที่สุดหรือเติมข้อมูลในช่องว่าง แล้วแต่กรณี

1. เพศ: ❑ชาย ❑หญิง
2. สัญชาติ: _____
3. วิชาเอก: _____
4. ระดับชั้น: ❑ปีที่ 1 ❑ปีที่ 2 ❑ปีที่ 3 ❑ปีที่ 4
5. ท่านเรียนภาษาอังกฤษมานแล้วกี่ปี

   _____ปี_____เดือน
6. ท่านมีประสบการณ์ต่างประเทศหรือไม่ หากเคย ท่านใช้เวลาในต่างประเทศนานเท่าใด

   ❑เคย _____ปี_____เดือน_____วัน ❑ไม่เคย
7. ในชั้นเรียนของคุณ ใช้ภาษาอะไร หากใช้สองภาษา สัดส่วนของแต่ละภาษาประมาณเท่าไหร่

   ❑ภาษาอังกฤษ ❑ภาษาไทย ❑ทั้งสองภาษา ภาษาอังกฤษ_____% ภาษาไทย_____%
8. เอกสารการเรียนการสอนเป็นภาษาอะไร หากใช้สองภาษา สัดส่วนของแต่ละภาษาประมาณเท่าไหร่

   ❑ภาษาอังกฤษ ❑ภาษาไทย ❑ทั้งสองภาษา ภาษาอังกฤษ_____% ภาษาไทย_____%
9. ข้อสอบในชั้นเรียนเป็นภาษาอะไร หากใช้สองภาษา สัดส่วนของแต่ละภาษาประมาณเท่าไหร่

   ❑ภาษาอังกฤษ ❑ภาษาไทย ❑ทั้งสองภาษา ภาษาอังกฤษ_____% ภาษาไทย_____%
10. การสอบภาษาอังกฤษที่ผ่านมา:

    ❑IELTS ❑TOEFL ❑O-NET ❑GAT ❑PAT ❑หรืออื่น ๆ: _____

    คะแนน: _____
11. ท่านสะดวกเข้าร่วมการสัมภาษณ์เพื่อแสดงความคิดเห็นเพิ่มเติมหรือไม่

    ❑สะดวก (ชื่อและช่องทางติดต่อของคุณ_____) ❑ไม่สะดวก

พหุน ปณ ฑิโต ชีเว

ส่วนที่ 2: ทัศนคติของผู้เรียนต่อการสอนเนื้อหาวิชาอื่นโดยใช้ภาษาอังกฤษในมหาวิทยาลัยแห่งหนึ่งในประเทศไทย

คำสั่ง: โปรดอ่านข้อความด้านล่างและทำเครื่องหมายในตัวเลือกที่ตรงกับความคิดเห็นของท่านมากที่สุด

5 = เห็นด้วยมาก 4 = เห็นด้วย 3 = ปานกลาง 2 = ไม่เห็นด้วย 1 = ไม่เห็นด้วยอย่างยิ่ง

ข้อ	ทัศนคติของผู้เรียนต่อการสอนเนื้อหาวิชาอื่นโดยใช้ภาษาอังกฤษ	5	4	3	2	1
1	ฉันชอบการเรียนที่ใช้ภาษาอังกฤษในการสอน					
2	ฉันรู้สึกเครียดเมื่อเรียนเนื้อหาวิชาต่าง ๆ เป็นภาษาอังกฤษ					
3	ฉันรู้สึกสบายใจที่จะเรียนด้วยภาษาไทยและภาษาอังกฤษ					
4	ฉันฟังไม่ทันเวลาอาจารย์สอนเป็นภาษาอังกฤษ					
5	ฉันได้ความรู้มากกว่าเมื่อเรียนด้วยภาษาอังกฤษ					
6	ฉันอยากใช้ภาษาอังกฤษในการทำงานในอนาคต					
7	การใช้ภาษาอังกฤษในการเรียนเนื้อหาวิชาต่าง ๆ ทำให้ฉันมีแรงบันดาลในการหางานที่ดีกว่า					
8	ฉันหมดความสนใจต่อกิจกรรมในชั้นเรียนที่เป็นภาษาอังกฤษ					
9	ฉันกลัวที่จะพูดภาษาอังกฤษในชั้นเรียน					
10	ฉันรู้สึกว่าการใช้ภาษาอังกฤษในการเรียนเนื้อหาวิชาต่าง ๆ นั้นไม่จำเป็น					
ข้อ	**ข้อดีในการใช้การสอนเนื้อหาวิชาอื่นโดยใช้ภาษาอังกฤษ**	**5**	**4**	**3**	**2**	**1**
11	การใช้ภาษาอังกฤษในการเรียนเนื้อหาวิชาต่าง ๆ ช่วยเพิ่มพูนทักษะการสื่อสารภาษาอังกฤษของฉัน					
12	การใช้ภาษาอังกฤษในการเรียนเนื้อหาวิชาต่าง ๆ เพิ่มความมั่นใจในการพูดภาษาอังกฤษของฉัน					
13	ฉันสบายใจมากขึ้นที่จะได้อ่านภาษาอังกฤษ					
14	การใช้ภาษาอังกฤษเพื่อเรียนเนื้อหาวิชาอื่นทำให้ทักษะการเขียนภาษาอังกฤษของฉันดีขึ้น					
15	ทักษะการฟังของฉันดีขึ้นเมื่อเรียนเป็นภาษาอังกฤษ					
16	ฉันได้พบและรู้จักเพื่อนต่างชาติมากขึ้นในชั้นเรียนที่จัดการเรียนการสอนเป็นภาษาอังกฤษ					
17	การใช้ภาษาอังกฤษในการเรียนเนื้อหาวิชาอื่น ๆ ทำให้ฉันเตรียมพร้อม สำหรับการเขียนบทความ เพื่อตีพิมพ์ในวารสารนานาชาติ					
18	การใช้ภาษาอังกฤษในการเรียนเนื้อหาวิชาต่าง ๆ ทำให้ฉันพร้อมที่จะทำงานที่มั่นคงกว่า					
19	การใช้ภาษาอังกฤษในการเรียนเนื้อหาวิชาต่าง ๆ ทำให้ฉันมีโอกาสศึกษาต่อในต่างประเทศมากขึ้น					
20	การใช้ภาษาอังกฤษในการเรียนเนื้อหาวิชาต่าง ๆ ทำให้ฉันมีโอกาสได้เงินเดือนมากขึ้น					
ข้อ	**ปัญหาในการใช้การสอนเนื้อหาวิชาอื่นโดยใช้ภาษาอังกฤษ**	**5**	**4**	**3**	**2**	**1**
21	การใช้ภาษาอังกฤษเพื่อสอนเนื้อหาวิชาอื่นเป็นอุปสรรคต่อการเข้าใจเนื้อหาที่เรียน					
22	ฉันไม่กล้าพูดภาษาอังกฤษที่มีสำเนียงไทยในชั้นเรียน					
23	ฉันกลัวใช้ภาษาอังกฤษผิดไวยากรณ์					
24	ฉันหลีกเลี่ยงการแสดงความคิดเห็นเป็นภาษาอังกฤษในชั้นเรียน					
25	ฉันไม่กล้าสอบถามสิ่งที่สงสัยในชั้นเรียน					
26	การมีส่วนร่วมอภิปรายเป็นภาษาอังกฤษในชั้นเรียนเป็นสิ่งที่ยาก					
27	การทำการบ้านที่เป็นภาษาอังกฤษเป็นสิ่งที่ยากสำหรับฉันวารสารนานาชาติ					
28	การอ่านตำราเป็นภาษาอังกฤษใช้เวลานาน					
29	ฉันไม่ค่อยมีสมาธิในการเรียนเวลาอาจารย์สอนเป็นภาษาอังกฤษ					
30	ฉันต้องจ่ายค่าเล่าเรียนสูงขึ้น เมื่อเรียนเป็นภาษาอังกฤษ					

ส่วนที่ 3: ความคิดเห็นส่วนบุคคล

1. ข้อดีของการสอนเนื้อหาวิชาอื่นโดยใช้ภาษาอังกฤษมีอะไรบ้างนอกเหนือจากที่ระบุไว้ในส่วนที่ 2

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2. ปัญหาของการสอนเนื้อหาวิชาอื่นโดยใช้ภาษาอังกฤษมีอะไรบ้างนอกเหนือจากที่ระบุไว้ในส่วนที่ 2

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พหูน ปณ ฑิโต ชีเว

Appendix C

Semi-structured Interview

Instructions: Please answer the questions regarding using English to teach the subject content based on your personal perspectives.

1. Please provide a brief introduction about yourself.
2. Could you please describe how teachers use English to teach the subject content in your class?
3. What do you know about English medium instruction?
4. Why do you choose to study in the English as a Medium of Instruction (EMI) program?
5. What do you think of these classes which are taught in English?
6. Could you please share your learning experience in these classes in English?
7. Are there any advantages of joining these classes? Please give examples?
8. Are there any disadvantages of joining these classes? Please give examples?
9. Is there anything else you would like to add to this point?

พหุน ปณ ฑิโต ชีเว

Appendix D

Semi-structured Interview (Thai Version)

การสัมภาษณ์แบบกึ่งโครงสร้าง

คำสั่ง: โปรดตอบคำถามเกี่ยวกับการสอนเนื้อหาวิชาอื่นโดยใช้ภาษาอังกฤษจากความรู้สึกของคุณ

1. กรุณาแนะนำตัวคร่าว ๆ
2. กรุณาอธิบายการใช้ภาษาอังกฤษที่อาจารย์ใช้สอนเนื้อหาวิชาอื่นในชั้นเรียน
3. คุณรู้อะไรบ้าง เกี่ยวกับการใช้ภาษาอังกฤษเป็นสื่อกลางในการสอน
4. ทำไมคุณจึงเลือกเรียนในหลักสูตรที่สอนเป็นภาษาอังกฤษ
5. คุณรู้สึกอย่างไรกับวิชาที่เรียนเป็นภาษาอังกฤษ
6. กรุณาเล่าถึงประสบการณ์การเรียนวิชาเหล่านี้เป็นภาษาอังกฤษ
7. การเรียนวิชาเหล่านี้เป็นภาษาอังกฤษมีข้อดีอย่างไร กรุณายกตัวอย่าง
8. การเรียนวิชาเหล่านี้เป็นภาษาอังกฤษมีข้อเสียอย่างไร กรุณายกตัวอย่าง
9. คุณมีข้อคิดเห็นอื่นเพิ่มเติมหรือไม่

พหูน ปณ ฑิโต ชีเว

BIOGRAPHY

NAME	Yilin Jiang
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POSITION	Student
EDUCATION	2009 Bachelor's Degree, English Major, Guizhou University 2021 Master of Education in English Language Teaching (M.Ed), Mahasarakham University

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