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An Analysis of Grammatical Errors Made by Thai EFL University Students in an EAP writing Class: Issues and Recommendations

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Abstract

Grammatical errors are major concerns for many teachers and students. The first step in tackling these errors is to investigate what kinds of grammatical errors students make and how frequently they occur so that remedies can be sought. This study thus set out to analyze the essays written by Thai EFL students. The data used for analysis were 58 essays (24,445 words) produced by 29 second-year students enrolled in an EAP writing class at a public university in Thailand. Through the analysis, 1,199 errors were found. The errors were classified into ten types, and errors on nouns, articles, verbs, word classes, and prepositions were the most frequently found errors, constituting 84.07% of all the errors identified. This study also further divided the ten types of errors into 49 subtypes. This thorough and in-depth error classification revealed that wrong use of singular and plural nouns, omission of the article 'the', and subject-verb disagreements were the most prevalent grammatical errors committed by the Thai EFL students in this study. Alarmingly, the results showed that Thai EFL students still struggle with grammatical accuracy when they write. Although these grammatical errors may not completely obscure the meanings of students' writing, the worrying point is their presence or prevalence can significantly undermine its quality and prevent it from reaching publishable quality. To address this issue, more attempts need to be made on the part of Thai EFL teachers. Therefore, this paper also provides recommendations for how to assist students in fixing these commonly made grammatical errors.

INTRODUCTION

For most second language (L2) learners, writing, especially academic writing, is regarded as the most difficult skill to master when compared with listening, reading, or even speaking. This is not a groundless statement but a fact supported by proficiency test data like IELTS test scores. In 2018, IELTS test takers whose first languages (L1) are Korean, Turkish, Vietnamese, and Thai scored the lowest in their writing skills. Thai test takers, for example, received on average the band scores of 6.3, 6.1, 5.9, and 5.4, out of the total of 9, on listening, reading, speaking, and writing respectively (IELTS, 2020). These figures demonstrated to some extent that L2 learners in these countries struggled with writing the most.

The fact that writing is a difficult skill is not surprising as writing ability involves not only linguistic knowledge but also the knowledge of genres and discourses, the recognition of writing techniques and strategies, as well as the awareness of social and cultural factors, all of which are intertwined (Burns & Siegel, 2018). Moreover, it requires writers to take control of various elements fundamental to the writing process such as content, vocabulary, grammar, and mechanics (Nuruzzaman, Islam, & Shuchi, 2018; Rattanadilok Na Phuket & Bidin, 2016). Among these elements, grammar is a major concern for many students and teachers in the Thai educational context. Boonyarattanasoontorn (2017) found that although Thai undergraduate students in her study experienced a lot of writing difficulties overall, they believed grammar was their most problematic area. As for EFL teachers in Thailand, like those in the studies of Nguyen (2018) and Tan and Manochphinyo (2017), the considerable amount of time and effort that they put into improving their students' grammatical accuracy also appears to reflect that grammar is an area that they believe their students need help with.

In Thailand, the Communicative Language Teaching (CLT) approach has been promoted for many years, and it has shifted the focus of primary and secondary school teachers away from grammar. Due to the lack of emphasis on grammar during primary and secondary education, a number of students come into an academic writing class at tertiary level without sound knowledge of grammar that will allow them to produce grammatically correct sentences in their written assignments. Usually, many university teachers find that students' writings contain several grammatical errors, such as punctuation, article, subject-verb agreement, and fragment errors found in the study of Sermsook, Liamnimitr, and Pochakorn (2017). Without a systematic inquiry into these errors, most teachers can roughly and intuitively perceive which errors are more predominant than others, but only through a systematic investigation of errors like Error Analysis (EA) can teachers truly discover the most frequently made errors, or the grammatical elements that many of their students find the most challenging to produce with accuracy. The awareness teachers have of the recurrent errors can allow them to prevent them from recurring in the future (Al-Sobhi, 2019). This is an important role the Error Analysis plays in a writing class.

The importance of learners' errors in the process of language learning has long been recognized by researchers, especially those in the field of Second Language Acquisition (SLA). Dulay, Burt, and Krashen (1982) asserted, "people cannot learn language without first systematically committing errors" (p. 138). Corder (1974) also pointed out that errors are important to teachers, researchers, and learners in different ways. Firstly, errors inform teachers of what learners have learned and what else they need to learn. Secondly, errors provide researchers with information about how learners learn or acquire the language and what strategies or methods they are using in the course of their learning. Finally, and most importantly, making errors is an essential tool that allows learners themselves to learn the language and to test the hypotheses they formulate about the language being learned.

As errors and their analysis are pertinent to and significant in SLA and language classrooms, there has been extensive research devoted to EA both in Thailand and in other EFL countries. This study adds to the rich EA literature by providing insights into grammatical errors made by Thai EFL leaners in their written products and through the explication of error sources relating

to interlingual and intralingual factors. Most crucially, this study presents empirical data on students' errors which clearly show that despite over a decade of receiving English instruction, many Thai EFL learners still experience grave difficulties in writing with grammatical accuracy. It thus calls for more attempts from Thai EFL teachers to help their students overcome these difficulties so that the quality of their writing can be improved. Such attempts are crucial because, without them, Thai university students may continue to commit these grammatical errors, which will definitely prevent them from producing writings that are of publishable quality in the future.

Following the error analysis procedure put forth by Gass, Behney, and Plonsky (2013), this study aims to answer the following research questions.

1. What are the grammatical errors found in the essays written by Thai EFL students in an EAP writing class, and how frequently are these errors found?
2. What are the most frequently found errors, and what might be their causes?

LITERATURE REVIEW

Error analysis

Error Analysis (EA) is a type of linguistic analysis concerned with errors produced by L2 learners (Gass et al., 2013). Dating back to the late 1970s, EA emerged when Contrastive Analysis (CA) began to lose its momentum (Al-Sobhi, 2019). Since the decline of the latter gave rise to the former, the literature review of EA would not be complete without the discussion of CA.

In the late 1900s, the English language teaching field was heavily influenced by Behaviorism; L2 learning was viewed as the result of habit formation, or a process of overcoming old habits of one's first language in order to adopt new habits of the language being learned (Larsen-Freeman & Long, 1991). From this viewpoint arose the Contrastive Analysis Hypothesis (CAH), which postulates that the primary obstacle that hinders L2 acquisition is L1 interference, and that a systematic analysis of L1 and L2 would shed light on the differences between the two languages which can be used to predict the difficulties L2 learners would face (Brown, 2007). With regard to errors made by L2 learners, CA asserts that L1 is the primary source of these errors, and more errors will occur if the differences between L1 and L2 are substantial (Gass et al., 2013). This assertion was, however, challenged by the results of empirical research, revealing that L1 interference was not the only source of errors made by L2 learners, and that numerous errors they made could not be traced back to it (Al-Sobhi, 2019). Because CA could not explain the errors that went beyond the influence of L1, the focus was shifted to EA as it "provides a broader range of possible explanations for researchers/teachers to use to account for errors than contrastive analysis, as the latter only attributed to the NL (native language)," (Gass et al., 2013, p. 92).

The views of EA on the roles of language learners and the errors they make are completely different from those of its predecessor. From the perspective of EA, learners are regarded not

as the ones who passively receive L1 input, but as those who actively process input, formulate hypotheses, and then examine and adjust them (Larsen-Freeman & Long, 1991). Gradually going through the trial and error as well as hypothesis testing process, L2 learners steadily become successful in constructing a system that is increasingly similar to that of native speakers (Brown, 2007). The system established by learners is commonly known as interlanguage, described by Larsen-Freeman and Long (1991) as "a continuum between the L1 and L2 along which all learners traverse" (p. 60). This system contains a number of elements that do not exist in L1 or L2 (Gass et al., 2013), and one way to probe into this system is to study learners' errors (Brown, 2007). In EA, errors are thus seen as the demonstration of learners' efforts to work out a system rather than their failed attempts to imitate L1.

Although EA originated in the field of SLA, it serves not only theoretical but also pedagogical purposes. In this respect, Ellis (1994) explained that many researchers conducting error analyses in the 1970s were motivated not only by the aspiration to find out more about L2 acquisition but also by the wish to enhance language teaching. Dulay et al. (1982) also stated that the purposes of studying learners' errors are twofold. First, it allows researchers to make inferences about how language is learned based on the data it provides. Second, it informs teachers and curriculum developers about the errors preventing students from achieving effective communication.

Previous studies on error analysis

As error analyses benefit both researchers eager to know more about learners' language acquisition and teachers keen on discovering the linguistic challenges faced by students, research in this area is abundant in Thailand as well as in other EFL countries. Although these researchers and teachers have a common goal of discovering errors made by L2 learners, the studies they have conducted are different in several ways, which will be thoroughly discussed below.

Procedures

Two procedures are widely used in conducting error analyses. The first one was proposed by Corder (1974) and includes five stages: 1) collection of samples of learner language, 2) identification of errors, 3) description of errors, 4) explanation of errors, and 5) evaluation of errors. It was noted by Ellis (1994) that the last step (i.e. evaluation of errors) is excluded from many studies as it is normally dealt with separately, and with different methodology. The other EA procedure was suggested by Gass et al. (2013). Researchers adopting this procedure need to 1) collect data, 2) identify errors, 3) classify errors, 4) quantify errors, 5) analyze source, and 6) remediate respectively. The key difference between these two procedures is the latter seems to primarily serve a pedagogical purpose, which is providing remedies for some of the students' errors found in the analysis, as suggested by its final step (i.e. remediate).

Examples of studies using different EA procedures are those of Phoocharoensil et al. (2016) and Promsupa (2016). Following Corder's (1974) five steps, Phoocharoensil et al. (2016) conducted an analysis of errors found in the paragraphs written by 15 lower-intermediate

graduate students in Thailand. Promsupa (2016), on the other hand, adopted the first five steps proposed by Gass et al. (2013) to carry out an analysis specifically on grammatical errors found in the essays produced by 34 undergraduate English major students in the same country. In her study, the sixth step (i.e. remediate) was not included as it was not relevant to her research questions.

Participants and data collection

The participants in a number of EA research studies are students enrolling in an English class at a university. As can be seen in Table 1 below, the participants in all of the studies reviewed in this section were undergraduate students, except only for those in Amiri & Puteh (2017) and Phoocharoensil et al. (2016). A possible reason why EA participants are mostly university students rather than primary or secondary school students is that higher education institutions usually stress the importance of writing skills more than those in primary and secondary education. One such example is Thailand. Most primary and secondary schools in this country put a lot of emphasis on developing students' receptive skills (i.e. listening and reading) because they are tested in national tests, such as the O-NET (the Ordinary Educational Test). On the contrary, most universities have the mission of preparing students for their future work and higher degree study, in which writing skills are essential. To achieve this goal, many universities therefore offer courses aiming to enhance students' writing. In these courses, university teachers may discover an abundance of writing errors committed by students, and in order to deal with this issue, error analyses are conducted.

Table 1

Previous Studies on Error Analysis

Study	Data	Type	Participant	Level	L1
Amiri & Puteh (2017)	16 term papers	*	students with lower than IELTS Band 6	graduate	Persian
Atmaca (2016)	32 paragraphs	final exam	elementary-level students	undergraduate	Turkish
Khatter (2019)	120 essays	in-class writing	Third-year English majors	undergraduate	Arabic
Nuruzzaman (2018)	90 paragraphs	final exam	non-English major students	undergraduate	Arabic
Phoocharoensil et al. (2016)	30 paragraphs	in-class writing	lower-intermediate students	graduate	Thai
Pongsukvajchakul (2019)	116 paragraphs	in-class writing	non-English major students	undergraduate	Thai
Promsupa (2016)	34 essays	take-home assignment	second-year English majors	undergraduate	Thai
Sermsuk et al. (2017)	104 pieces of written work	*	second-year English majors	undergraduate	Thai
Seyitkuliyev et al. (2020)	15 paragraphs	take-home assignment	upper-intermediate, first-year, non-English major students	undergraduate	Turkmen
Suvarnamani (2017)	180 paragraphs	final exam	first-year Arts students	undergraduate	Thai
Waelateh (2019)	45 essays	*	lower-intermediate students	undergraduate	Arabic

* Not mentioned in the research article

Table 1 also shows that the data collected from the participants in these studies ranged from shorter texts like paragraphs to longer ones like essays and term papers. In terms of data collection, these data were collected in three different manners: from in-class writing (i.e. Khatter, 2019; Phoocharoensil et al., 2016; Pongsukvajchakul, 2019), from take-home assignments (i.e. Promsupa, 2016; Seyitkuliyev et al., 2020), and from part of the final exams (i.e. Atmaca, 2016; Nuruzzaman, 2018; Suvarnamani, 2017).

In fact, EA scholars and researchers have different justifications for the data selected for error analyses. Ellis (1994) explained that, in general, natural samples, or those that "reflect natural, spontaneous use" (p. 50) of L2 learners are favored, but the problem is if learners are asked to write spontaneously, they do not normally produce a lot of data. To tackle this problem, Corder (1973) argued for the use of two methods for eliciting learners' data: clinical elicitation (e.g. requesting learners to write a composition) and experimental methods (e.g. asking learners to describe a series of pictures designed to elicit certain kinds of language researchers wish to explore). There are also researchers who are in support of using exam papers as data for analysis. Nuruzzaman (2018) and Suvarnamani (2017) chose paragraphs students were required to write in the final exams as samples, contending that these data demonstrated the real writing abilities of students and provided true pictures of their errors.

Data analysis and classification of errors

Norrish (1983) recommended two main approaches for analyzing and classifying data in error analyses. The first approach, called the 'Pre-Selected Category' approach, is more prevalent than the other. It is used to analyze data based on a predetermined group of errors believed by researchers to occur frequently. EA researchers adopting this approach need to, first of all, select a category of errors they will use as a basis for their analysis and then analyze their collected data according to the category they have chosen. There are quite a lot of analyses employing this 'Pre-Selected Category' approach. Pongsukvajchakul (2019) chose the category of errors adapted from Brown (2000) and Dulay et al. (cited in Zheng & Park, 2013). The category contained six types of errors: errors of addition, omission, substitution, misordering, misinformation, and others. In her analysis, she identified and classified the errors found in her collected data into these six types. Seyitkuliyev et al. (2020) used Byrd and Benson's (1994) error category as the framework for analysis, so the errors in their study were classified into the most serious problems, intermediate problems, and punctuation and mechanic problems. Promsupa (2016) analyzed her study's data based on the Grammatical Error Classification, which she adapted from Dulay et al. (1982) and James (1998). The classification contains 16 sub-types of morphological errors and 16 sub-types of syntactic errors, all of which had been chosen by the researcher before her data analysis began.

The second approach suggested by Norrish (1983) is what he calls the 'Let the Errors Determine the Categories' approach. As the name suggests, once identified, errors are classified into certain areas, such as grammar or semantics. In the study of Sermsuk et al. (2017), for example, the errors were identified and then classified into two main groups: errors occurring at the sentence level and those occurring at word levels. Another example is Phoocharoensil et al. (2016), who identified all grammatical errors in the students' writings and then classified them into 10 major types, such as errors on verbs, articles, and word classes.

Norrish (1983) explained that both approaches have their own benefits and drawbacks. Although the first approach can be conducted more easily and more quickly than the other, its main disadvantage is that the errors are prejudged by researchers and they can be sorted out only according to the predetermined error types. What he implies is there might be errors that are left out or unexplored if they do not fit any types of errors predetermined by researchers. The second approach, on the other hand, is definitely more time-consuming, but it is advantageous in that the categories are determined by the actual errors found.

Another approach of data analysis which combines the two approaches discussed above was used in Suvarnamani's (2017) study. The researcher firstly selected three types of errors she wished to investigate in her study. They were tense, fragment, and collocation errors. Then, different kinds of errors related to each of these three were identified. She found 13 subtypes of tense errors (e.g. using Past Simple instead of Present Simple and vice versa), three subtypes of fragment errors (i.e. omission of verb, omission of subject, and dependent-word fragment), and four subtypes of collocation errors (e.g. wrong verb-preposition collocation). Each of these subtypes was also counted. For instance, verb omission (n=16) made up the majority of the fragment errors identified, followed by subject omission (n=13) and dependent-word fragments (n=3).

Among these three approaches to error analysis, the approach adopted by Suvarnamani (2017) seems to provide the most detailed and insightful information about students' errors.

Identification of error sources

In the EA framework, after the errors have been identified and classified into different types, the step that follows is to identify the sources of these errors. This is an important step as it allows researchers to understand learners' cognitive and affective levels in their L2 acquisition process (Brown, 2007).

To identify the sources of errors, many researchers (e.g. Nuruzzaman, 2018; Phoocharoensil et al., 2016) borrowed from the EA literature on interlingual and intralingual errors. Interlingual errors refer to errors that originate from L1 interference (Larsen-Freeman & Long, 1991). Nuruzzaman (2018) classified some errors found in the paragraphs written by the Saudi students in his study as this type of error as they could be traced back to Arabic, the students' L1. One example he discussed was 'car new' (p. 37). In Arabic, a noun must come before an adjective, so the student made this error using his or her knowledge of the word order in L1 (Arabic), not L2 (English). Intralingual errors, in contrast, refer to those that are not caused by L1, but by the language being learned (Gass et al., 2013). Phoocharoensil et al. (2016) found that a participant omitted *be* when writing 'She always *wearing* pants when directing in theatre' (p. 19). The researchers explained that the omission of *be* was considered an intralingual error, resulting from the complexity of verb form construction in the English language.

Apart from broadly dividing errors into interlingual and intralingual errors to account for the sources of errors, some researchers, like Pongsukvajchakul (2019) and Promsupa (2016), added more depth to the analysis by further dividing intralingual errors into four types (proposed by

Richards, 1974): overgeneralization, ignorance of rule restrictions, incomplete application of rules, and false concepts hypothesized. Overgeneralization occurs when L2 learners create a structure deviating from the norm of the language being learned due to their limited experience in the language. Ignorance of rule restrictions happens when learners apply the rules they have learned to the context where they are not applicable. Incomplete application of rules is committed when learners use basic rules instead of complex ones to achieve effective communication without paying much attention to language accuracy. False concept hypothesized arises when learners misunderstand the rules of L2 and use them incorrectly as a result.

Drawing on the literature of interlingual and intralingual errors was not the only method employed by EA researchers to identify the sources of learners' errors. To find out what causes L2 learners to commit errors, several researchers asked them directly through questionnaires or interviews. Rattanadilok Na Phuket and Bidin (2016) conducted in-depth interviews with five English majors from two universities and found that verbatim translation, the use of bilingual dictionaries, and inadequate knowledge also contributed to the learners' errors. Sermsuk et al. (2017) discovered from their questionnaires and interviews that, apart from other factors, students also committed errors due to their carelessness. Based on the interviews with 15 participants, Suvarnamani (2017) concluded that incorrect pronunciation, direct translation, and time constraints of the final exam also induced students to make errors.

In short, the EA literature and the students themselves are the two sources researchers who conduct error analyses can turn to when they need to determine the causes of the errors.

The present study

The primary motivation for carrying out this study was to investigate the grammatical errors made by Thai EFL students in a real language classroom so that teachers, especially EFL teachers in Thailand, can be better informed about the grammar-related problems faced by students when they write. This knowledge is particularly important in that it draws teachers' attention to the specific areas (i.e. the most frequently made errors) that need to be dealt with when students' grammatical accuracy is at stake. It should be noted, however, that although the results of the study (i.e. the errors found and the causes identified) also in part contributed to the field of SLA, this is of secondary importance for this study.

Taking the pedagogical goals into consideration, the researcher has chosen to follow the procedure established by Gass et al. (2013) when conducting the error analysis. The original procedure involves six steps: 1) collecting data, 2) identifying errors, 3) classifying errors, 4) quantifying errors, 5) analyzing sources, and 6) remediating. Nevertheless, the last step (i.e. remediating) is not included in this study as it does not respond to any of the two research questions and goes beyond the scope of the study.

METHODOLOGY

Participants and context of the study

The participants were 29 second-year students of the Faculty of Economics in a public university in Bangkok, Thailand. All of them were native Thai speakers who had learned English for at least 13 years. During the semester in which the data were collected, the participants were enrolling in an English for Academic Purposes (EAP) writing course. It was the fourth English course they were required to take as part of their four-year bachelor's degree, and its main purpose was to enable the students to write essays on issues related to the field of economics. Before this course, the participants had taken two integrated-skills courses and one EAP reading course, which was also specifically tailored to the Economics students. The participants were all in the same class. They were, in fact, placed into the same group based on the grades they received from the English course they took in the previous semester; most of them earned B+ or B grades and were put in the same section. Because of this placement policy, the participants were rather homogenous in terms of their language proficiency.

In this EAP writing course, the participants learned how to write academic essays, and the essays they wrote were evaluated based on four criteria: task completion, organization, lexical variety, and structural variety and accuracy. (See the Writing Assessment Rubric in the Appendix.) The scores they received, as presented in Table 2, showed that most of them performed relatively well in the first two areas (i.e. task completion and organization), had some difficulties in the third area (i.e. lexical variety), and struggled with the last area (i.e. structural variety and accuracy) the most. In other words, their essays contained ideas that were rather well-supported and well-organized, but were filled with some inappropriate word choices and quite a number of grammatical errors. Evidently, these errors affected the overall quality of their writing. It is therefore of pivotal importance to analyze these errors and identify their sources so that they can be dealt with and that the writing quality can be enhanced.

Table 2

Average Scores of Each Essay Component and Average Total Score

Task Completion (2.5 points)	Organization (2.5 points)	Lexical Variety (2.5 points)	Structural Variety and Accuracy (2.5 points)	Total (10 points)
2.07	1.96	1.88	1.58	1.87

Data selection

Regarding the essay types, the participants learned to write four types of academic essays: Cause and Effect, Comparison and Contrast, Problem-Solution, and Argumentation. Two types of essay, Comparison and Contrast, and Argumentation, were classwork; the participants wrote and submit these essays in class within an hour. The other two, Cause and Effect, and Problem-Solution, were take-home assignments; the participants were given one week to complete the essays in their own time outside of class.

Only the two take-home assignments were selected for analysis in this study. Such selection was made due to the concerns about the writing mistakes students might make when writing under the time constraints of the classwork. Brown (2007) contended that it is imperative to distinguish between mistakes and errors when studying the language of learners as only the latter reflects the proficiency of the learners. Larsen-Freeman & Long (1991) explained the differences of these two terms saying, "whereas a mistake is a random performance slip caused by fatigue, excitement, etc., and therefore can be readily self-corrected, an error is a systematic deviation made by learners who have not yet mastered the rules of the second language" (p. 59). Under the one-hour time limit of the classwork, the students might feel stressed or worried about finishing their essays, causing them to make not only errors but also mistakes in their writings. Therefore, when compared with classwork, the take-home assignments were likely to contain fewer mistakes, as the students were not subjected to the emotional toll of writing under time pressure. When mistakes were taken into consideration, the take-home assignments were the better sources of data and were thus purposely selected for analysis.

Data collection

The data chosen for this study's analysis were 58 essays (24,445 words) written by the participants (n=29). The data consisted of two types of essays: Cause and Effect essays (n=29) and Problem Solution essays (n=29). (See the data details in Table 3.) The participants were assigned to write these essays as requirements for the course. The essays were assigned to them as take-home assignments, meaning that they had to write the essays outside of class in their own time. The time allowed for completing each essay was one week. The students were permitted to consult only English-English or English-Thai dictionaries when writing. The essays were typed and emailed to the section teacher. The essays were collected for the error analysis in this study, and all of the participants had given consent to having their data analyzed before the analysis began.

Table 3

Details of the Data

Essay	Number of essays	Total number of words	Average words
Cause and Effect essays	**29**	**12,828**	**442**
Problem-Solution essays	**29**	**11,617**	**401**
Both types of essays	**58**	**24,445**	**843**

Data analysis

The error analysis conducted in this study involved the five steps suggested by Gass et al. (2013). Each step was explained below.

Step 1: Collecting data

The data were collected from two types of essays each participant was required to complete as take-home assignments. These essays were originally stored in MS Words files, so they were printed out for analysis.

Step 2: Identifying errors

In identifying the errors in the data, the researcher adopted the 'Let the Errors Determine the Categories' approach, proposed by Norrish (1983). This approach was used because it allowed the researcher to appropriately answer the first research question: What are the grammatical errors found in the essays written by Thai EFL students in an EAP writing class, and how frequently are these errors found? To respond to the question properly, the researcher had to allow all grammatical errors students made to emerge rather than sorted them out according to a predetermined set of errors, which might not cover all of the errors made by the participants in the study.

After the approach was selected, the researcher adopted the role of the first coder and read through each essay line by line in search of any grammatical error. Once an error was spotted, the coder mentally identified what the error was. After that, she created a code representing this particular type of error and then wrote it above the error. For example, in the sentence (A) below, the student writer unnecessarily added the article *the* in front of the noun 'poor health care services'. In her head, the coder identified this error as 'adding unnecessary *the*,' so the code 'UnThe' was devised and then written above the article *the* in this sentence. In fact, three main types of errors were found: errors of omission, addition, and misuse, which were represented by M (indicating *missing of something* or *omission*), Un (referring to *unnecessary addition*), and W (signifying *wrong use* or *misuse*) respectively.

(A) *One reason people leave rural areas is that they face *the* poor health care services. [Essay 3.1]

The first coder repeated these steps until all of the errors were identified across all 58 essays. To ensure the coding accuracy, the second coder was recruited to check all of the errors identified by the first coder. The second coder is a Thai EFL teacher who has taught English at the same institution as the first coder for more than five years and has extensive experience in teaching writing and providing feedback on students' writings. When the two coders had disagreements on certain errors, for example, whether the letter 'I' in the phrase 'the Internet' should always be capitalized, a meeting was held to resolve the issues. In the meeting, the two coders had a discussion and consulted four main sources: two online dictionaries: *Longman Dictionary of Contemporary English* and *Cambridge Dictionary*, and three grammar books: *Longman grammar of spoken and written English* (Biber, Leech, & Finegan, 1999), *Cambridge grammar of English: A comprehensive guide: Spoken and written English grammar usage* (Carter & McCarthy, 2006), and *Practical English Usage* (Swan, 2005). In the case illustrated above, the phrase 'the internet' with the uncapitalized 'i' was finally not identified as an error as it is also an acceptable form in British English according to the *Cambridge Dictionary*. However, if particular issues could not be solved through meetings between the first and the second coders, a third opinion would be sought from another experienced Thai EFL teacher, and discussions between the three would continue until a consensus was reached.

Step 3: Classifying errors

After all of the errors had been identified and checked for correctness, they were firstly grouped into different types based on grammatical categories, such as nouns, verbs, and articles. For instance, five types of errors, including omission of *the* (MThe), omission of *a* or *an* (MA/An), addition of *the* (UnThe), misuse of *a* or *an* (MAan/The), and misuse of *the* (The/Aan), were grouped into errors on articles. Finally, these errors of different grammatical categories were grouped into 1) errors at word level, 2) errors at sentence level, and 3) mechanical errors.

It should be noted that this classification is similar to that of Suvarnamani (2017) in that errors are classified into not only types but also subtypes. In this study, for example, verb tense errors were classified into six subtypes, such as misuse of Present Continuous in place of Present Simple and misuse of Present Perfect instead of Past Simple. From a pedagogical perspective, this classification provides a much clearer picture of the areas, or in this case, which tenses, can be most challenging for students. In an academic writing class, with tight schedules and prescriptive syllabi, knowing where to focus on is essential. It would be impossible for teachers to address all the errors students make, but at least the most problematic ones should be taken care of. This definitely justifies the need for this kind of classification, especially in an EAP writing class.

Step 4: Quantifying errors

The errors which had already been classified into different types were counted based on the types they belonged to. After that, the error types were ranked from the ones with the highest numbers to those with the lowest numbers.

Step 5: Analyzing sources

In this final step, the errors were divided to interlingual and intralingual errors. Those resulting from the interference of the Thai language, the participants' L1, would be specified as interlingual errors. On the other hand, the errors that were mainly attributable to the complex grammatical rules in English would be described as intralingual errors.

In identifying the interlingual errors, the researcher used her knowledge of Thai, which is her L1, and consulted *A reference grammar of Thai* (Iwasaki & Ingkaphirom, 2009). According to Brown (2007), although it is sometimes not clear if an error is an interlingual error, proficient knowledge or familiarity of learners' L1 definitely assists teachers in identifying and analyzing this type of error. As a native Thai speaker who is proficient in and familiar with the Thai language, the researcher's authority in identifying this type of errors is therefore well-established.

RESULTS AND DISCUSSION

In this section, the results gained from the error analysis will be fully discussed in response to each of the two research questions proposed at the beginning of this paper. Also, they will be examined in relation to the existing EA literature.

Research question 1: Categories, types, percentages, and ranks of errors

The errors found in this study fell into three categories (see Table 4): errors at word level, mechanical errors, and errors at sentence level. Errors at word level encompassed five types: errors on nouns, articles, verbs, word classes, and prepositions. Mechanical errors involved two types of errors on capitalization and punctuation. The last category, errors at sentence level, included three types of errors on fragments, run-ons, and voices.

Among these three error categories, errors at word level were greatest in number. There were altogether 1,008 errors in this category, accounting for 84.07% of all the errors identified in the analysis. Compared with the first category, the second and the third categories contained significantly lower numbers of errors. That is, of the 1,199 errors, the participants made 120 mechanical errors, making up 10.01%, and only 71 errors at sentence level, constituting 5.92%.

Table 4

Categories, Types, Percentages, and Ranks of Errors

Category	Type of Error	Token	Percentage	Rank
1. Errors at word level (1,008 tokens, 84.07%)	**1. Nouns**	**301**	**25.10**	**1**
	2. Articles	**258**	**21.52**	**2**
	3. Verbs	**236**	**19.68**	**3**
	4. Word Classes	**115**	**9.59**	**4**
	5. Prepositions	**98**	**8.17**	**5**
2. Mechanical errors (120 tokens, 10.01%)	**1. Capitalization**	**61**	**5.09**	**6**
	2. Punctation	**59**	**4.92**	**7**
3. Errors at sentence level (71 tokens, 5.92%)	**1. Fragments**	**40**	**3.34**	**8**
	2. Run-ons	**17**	**1.42**	**9**
	3. Voices	**14**	**1.17**	**10**
	Total	1,199	100	10

In terms of the ranks, errors on nouns ranked first, accounting for 25.10%, or around one fourth of all the errors identified. Article errors came second with 21.52%, followed by errors on verbs (19.68%). These three error types with the highest ranks belonged to the same category (i.e. error at word level), and together, they accounted for as much as 66.3% of all the errors. In addition, they were the only types of errors with the percentages of higher than 10%, whereas the rest (i.e. errors on word classes, prepositions, capitalization, punctuation, fragments, run-ons, and voices) each had the percentage of lower than 10%.

Research question 2: The most frequently found errors and their sources

The most frequently found errors included errors on nouns (25.10%), articles (21.52%), verbs (19.68%), word classes (9.59%), and prepositions (8.17%), all of which were categorized as

errors at word level. When combined, these errors constituted 84.06% of all the errors identified in this study. Therefore, to answer the second research question, these errors as well as their possible causes will be explained in detail.

Although the explanation of the 84.06% of all the errors made will sufficiently answer this research question, the researcher sees that this section will not be complete if some parts of the results are omitted. Therefore, the discussions on mechanical errors and errors at sentence level, despite making up only 15.93%, will also be included. However, since they are not directly relevant to the research question, they will be discussed to a lesser extent.

In addition, it is worth noting that in this study the ten types of errors in Table 4 were also divided into different subtypes, and there were 49 subtypes of errors in total. In Tables 5-11 below, these error subtypes were grouped under the error types they were related to. For example, the first type of errors, noun errors, comprised five subtypes: 1) wrong use of singular form instead of plural form, 2) wrong use of plural form instead of uncountable form, 3) wrong use of singular form instead of uncountable form, 4) wrong use of plural form instead of singular form, and 5) use of wrong plural form. Apart from these subtypes, their codes, characteristics, descriptions, examples, numbers of tokens, and percentages are also presented in the tables.

Another thing important to be mentioned is that like an academic writing class which is circumscribed by time and syllabus, this paper is also restricted by length and space. Due to such limitations, it would not be possible to address all of the 49 subtypes of errors in equal detail. The researcher is therefore obliged to disregard some and include only the most pertinent ones in the discussions below.

1. Nouns

Table 5

Subtypes of Noun Errors

	Code	Characteristic	Description	Example	Token	Percentage
Singular, plural, and uncountable forms (296 tokens, 24.98%)	**WSing/Plu**	**Misuse**	**Use singular form instead of plural form**	**(1) •It will make people think more about *benefit* and *cost* of buying new car. [Essay 2.2]**	**250**	**20.85**
	WPlu/Unc	**Misuse**	**Use plural form instead of uncountable form**	**(2) •In addition, *educations* in rural areas have lower quality. [Essay 20.1]**	**26**	**2.17**
	WSing/Unc	**Misuse**	**Use singular form instead of uncountable form**	**(3) •A rise of pollution causes many people have *a worse health*. [Essay 19.2]**	**12**	**1**
	WPlu/Sing	**Misuse**	**Use plural form instead of singular form**	**(4) •The government should pay attention to this serious *problems*. [Essay 4.1]**	**8**	**0.67**
Plural form (5 tokens, 0.42%)	**WPluForm**	**Misuse**	**Use wrong plural form**	**(5) •Traffic *polices* will have lung cancer, if there is air pollution in Bangkok. [Essay 20.2]**	**5**	**0.42**

Noun errors were the most frequently found errors in this study, with 301 tokens, making up 25.10% of all the errors made by the participants. Within this type of errors, as can be seen in Table 5, one subtype clearly predominated: the misuse of singular form instead of plural form (20.85%), or using the singular form of a noun in the place where its plural form is obligatory. In (1), to be grammatically correct, the nouns *benefit* and *cost* must be in plural forms, not the singular forms as appearing in the sentence. In terms of intended meaning, the participant writing this sentence probably meant some *benefits* and *costs*, rather than a *benefit* and *a cost*, as when people consider the benefits and costs of something, they normally think of some, not only one. There were many instances like this in the data analyzed in this study, where the participant writers seemed to talk about more than one thing but used the singular form of a noun instead of its plural form.

In the existing EA literature, the predominance of errors on singular and plural forms was also observed in Promsupa's (2016) study, which is the same as the present study in that it was devoted to analyzing the grammatical errors found in the essays written by students in an academic writing class. Agreeing with Promsupa (2016), the researcher regards the misuse of singular form instead of plural form as an interlingual error caused by the interference of the Thai language. In Thai, nouns do not change their forms to indicate singularity or plurality. In (1), for example, whether a Thai speaker wants to refer to one benefit or several benefits, the Thai word for benefit (ประโยชน์) does not change its form, and the same form can be used as both singular and plural nouns. Consequently, under the influence of their L1, many participants simply used a noun as it is without changing its form to specify if it is a singular or plural noun. In fact, this is in contradiction to the grammatical rules of countable nouns in the English language. In English, a common countable noun must be in either a singular form used with an article, such as *a benefit* or *the benefit*, or a plural form, such as *benefits* (Biber et al., 1999). It seems the participant who wrote (1) did not adopt these rules when writing as none of the nouns in this sentence (i.e. *benefit, cost,* and *new car*) was in the correct form.

Another subtype of noun errors that deserves discussion is the misuse of plural form instead of uncountable form, constituting 2.16% of all the errors made by the participants in this study. In (2), for instance, probably ignorant of the fact that *education* is an uncountable noun, the participant wrote it in the plural form *educations*, which is ungrammatical. In fact, the concepts and rules of countable and uncountable nouns in English are utterly complicated and thus confusing for many L2 learners. Even for the researcher, before applying the code WPlu/Unc, she had to check the suspicious noun (i.e. the one suspected of being an uncountable noun incorrectly written in the plural form) against dictionaries as she was aware that when it comes to countable and uncountable nouns, there are no hard and fast rules that can be applied to all situations, and there are a lot of exceptions. The word *education*, for example, despite referring to an abstract idea mostly presumed to be uncountable, can also be used as a singular noun, but not a plural noun, when referring to the teaching and learning process in formal education institutions, according to the online Longman Dictionary of Contemporary English. Taking the sheer complexity of countable and uncountable nouns into consideration, the researcher regards the wrong use of plural form with an uncountable noun as an intralingual error. In (2), for example, the participant writer seemed to have internalized the rules of plural form (as evident in *educations* and *areas*) but overgeneralized the rule by applying it with the

uncountable noun *education*, which is unacceptable. Such overgeneralization somehow reflected that he still had limited knowledge about this noun feature in English (i.e. countable vs. uncountable), which is not surprising considering its convolutions.

2. Articles

Table 6

Subtypes of Article Errors

Code	Characteristic	Description	Example	Token	Percentage
MThe	**Omission**	**Omit *the***	**(1) *Better jobs, higher quality education and good healthcare services are three main reasons why Thai people are keen on a move to Ø urban side. [Essay 14.1]**	**128**	**10.68**
MAan	**Omission**	**Omit *a* or *an***	**(2) *It makes people prefer using Ø private car that causes toxic gas. [Essay 6.2]**	**54**	**4.5**
UnThe	**Addition**	**Unnecessarily add *the***	**(3) *In addition, *the* retail shop is one of the amenities that people want to have in town. [Essay 3.1]**	**47**	**3.92**
WAan/The	**Misuse**	**Use *a* or *an* instead of *the***	**(4) *In *a* recent decade, there has been an upward trend in the urban population in Thailand. [Essay 15.1]**	**21**	**1.75**
WThe/Aan	**Misuse**	**Use the instead of *a* or *an***	**(5) *Some people may argue that if we are seeking for a sustainable solution, shifting vehicles energy source to electric is *the* good solution. [Essay 1.2]**	**8**	**0.67**

The second most frequently found errors in this study were article errors. The participants committed 258 errors relating to the use of articles, which made up 21.43% of all the errors found. This type of error could be divided into five subtypes (see Table 6), involving the omission of articles as in (6) and (7), the addition of unnecessary *the* as in (8), and the misuse of articles as in (9) and (10).

Among the five subtypes of article errors, the omission of *the* had the highest percentage of 10.68%. As shown in (6), the article *the* in front of the singular noun *urban side* was missing. This sentence was found in the concluding paragraph, and the noun *urban side* had already been mentioned multiple times in the previous paragraphs, so it must be preceded by the article *the* (Swan, 2005). Sentence (8) demonstrated another violation of *the* rule. In English, when people or things in general are talked about, *the* is not usually used with uncountable or plural nouns (Swan, 2005). The participant writer of (8) seemingly intended to talk about *retail shops* in general rather than a specific one; therefore, *the* should not be applied. Another subtype of article errors found frequently was the omission of the articles *a* or *an* (4.5%). In fact, the knowledge of articles is closely related with that of singular nouns. As explained earlier, in English, a singular noun cannot stand alone; it must be preceded either by the indefinite articles *a* or *an*, or by the definite article *the*. The participant writer of (7) used the noun *private car* without any articles, thereby violating both singular noun and article rules.

Articles are an uphill struggle among L2 learners of diverse L1 backgrounds; they have ranked among the top three of the most frequently found errors in many previous studies (Atmaca, 2016; Phoocharoensil et al., 2016; Promsupa, 2016; Sermsuk et al., 2017; Seyitkuliyev et al.,

2020). For Thai EFL learners, errors on articles are regarded as interlingual errors as they have no existence in the Thai language, making it extremely difficult for the learners to understand the article rules and make use of them correctly.

3. Verbs

Table 7

Subtypes of Verb Errors

	Code	Characteristic	Description	Example	Token	Percentage
Subject-verb agreement (119 tokens, 9.92%)	SVDPlu/ Sing	Misuse	Use plural verb form instead of singular verb form	(1) *Moreover, it just *reduce* carbon emission in short term. [Essay 9.2]	99	8.26
	SVDSing/ Plu	Misuse	Use singular verb form instead of plural verb form	(2) *Fewer medical specialists in urban *was* not enough to serve the population. [Essay 4.1]	20	1.67
Verb tense (68 tokens, 5.67%)	WVTPast/ Pres	Misuse	Use past simple tense instead of present simple tense	(3) *However, Bangkok still has one big problem, air pollution. Most people in Bangkok *were* affected by this problem. [Essay 17.2]	35	2.92
	WVTPres/ Past	Misuse	Use present simple tense instead of past simple tense	(4) *Between 2006 and 2009, the number of sky train passengers *increases* stably. [Essay 20.1]	19	1.58
	WVTCon/ Pres	Misuse	Use present continuous tense instead of present simple tense	(5) *One reason that cause people leaving their hometown is that they *are seeking* for better education. [Essay 2.1]	5	0.42
	WVTPresPer/ Past	Misuse	Use present perfect tense instead of past simple tense	(6) *However, air pollution problem *has been* difficult to solve in the past. [Essay 4.2]	5	0.42
	WVTPres/Fut	Misuse	Use present simple tense instead of future simple tense	(7) *If the use of personal cars decrease, air pollution *decrease*. [Essay 26.2]	2	0.17
	WVTPastPer/ PresPer	Misuse	Use past perfect tense instead of present perfect tense	(8) *Migration *had happened* for long time ago since the origin of cavemen. [Essay 9.1]	2	0.17
Verb *be* (32 tokens, 2.67%)	MBe	Omission	Omit verb *be*	(9) *Furthermore, qualified schools and universities (^) almost located in urban areas. [Essay 1.1]	28	2.34

	UnBe	Addition	Unnecessarily add verb *be*	(10) *More number of school in urban *are* means that there is more chance for the children to pass the admission and accepted by school. [Essay 2.1]	4	0.33

In the present study, verb errors ranked third and included four subtypes: errors on subject-verb agreements (9.88%), verb tenses (5.65%), verb *be* (2.66%), and finite and nonfinite verbs (1.41%).

Thai L2 learners usually find English verbs perplexing as they are markedly different from Thai verbs. That is, while English verbs show gender, number, and tense, Thai verbs do not (Iwasaki & Ingkaphirom, 2009). Among highly complex structures of English verbs, the L1 Thai participants in this study struggled with subject-verb agreements the most (9.92%), particularly with singular verbs (8.26%). In (11), for example, the wrong plural verb *reduce* was used in place of the correct singular verb *reduces*. The participant writer did not change the form of the verb *reduce* to agree with the subject pronoun *it* in the sentence, due probably to the interference of the Thai language, in which verbs do not have to change forms to agree with subjects. No relationships between these two in terms of number exist in this language. Subject-verb disagreements are thus interlingual errors.

Regarding verb tense errors, the participants wrongly used past simple tense for present simple tense the most (2.92%) as in (13), followed by the wrong use of past simple tense in the places where the present simple tense was necessary (1.58%) as in (14). This concurs with the study of Suvarnamani's (2017), in which the students incorrectly used these two tenses at a much higher degree than the others. The examples 13-18 showed that the participants had knowledge of verb tenses in English; however, they seemed confused about which ones to use and the confusion induced them to make verb tense errors. Therefore, in line with Promsupa (2016) and Phoocharoensil et al. (2016), verb tense errors should be regarded as intralingual errors attributed to the immensely complicated concepts and rules of verb tenses.

4. Word classes

Table 8

Subtypes of Word Class Errors

Code	Characteristic	Description	Example	Token	Percentage
WInf/Ger	Misuse	Use infinitive instead of gerund	(1) *Some people think that *prohibit* old car will work more than using public transportation. [Essay 6.2]	24	2
WN/Adj	Misuse	Use noun instead of adjective	(2) *The renewable energy cars are not *safety* for driver. [Essay 13.2]	23	1.92
WAdj/N	Misuse	Use adjective instead of noun	(3) *To compare with urban cities, there are a *numerous* of jobs, so it attracts to people from other cities. [Essay 21.1]	20	1.67
WAdj/Adv	Misuse	Use adjective instead of adverb	(4) *The number of students in the central urban areas was higher than rural areas because of a large number of *high* educated teachers. [Essay 27.1]	11	0.92

WGer/Inf	Misuse	Use gerund instead of infinitive	(5)	*Most doctors who have good skills and abilities refuse ***working*** in rural communities. [Essay 3.1]	11	0.92
WAdv/Adj	Misuse	Use adverb instead of adjective	(6)	*The shortage of hospitals leads the ***highly*** mortality in rural areas. [Essay 25.1]	9	0.75
WN/V	Misuse	Use noun instead of verb	(7)	*Why do people in rural areas want to ***immigration*** to urban centers? [Essay 8.1]	8	0.67
WV/Adj	Misuse	Use verb instead of adjective	(8)	*If everything still ***likes*** this, all humanity will collapse in the future. [Essay 5.2]	5	0.42
WV/N	Misuse	Use verb instead of noun	(9)	*They also get some ***believes*** and cultures from immigrants. [Essay 6.1]	2	0.17
WAdj/V	Misuse	Use adjective instead of verb	(10)	*When time ***past***, the reasons why Thai people migrate from rural to urban areas are different. [Essay 26.1]	2	0.17

Regarding the word class errors, the participants made wrong use of infinitives and gerunds the most (2.92%). For example, in (23), the infinitive *prohibit* was incorrectly used as the subject of the sentence, while the gerund *working* was wrongly put after the verb *refuse* in (27). It should be noted that in this study errors on gerunds and infinitives were classified as word class errors because when many of them were found in the data, they did not function as the main verbs like those classified under the third group (i.e. verb errors).

In fact, word classes, or parts of speech, in English are very complex. Infinitives, gerunds, verbs, nouns, adjectives, and adverbs have their own forms, locations, and functions they perform. Essentially, they cannot be used interchangeably. In (24), for example, the noun *safety* cannot be used instead of the adjective *safe* to modify the preceding noun *the renewable energy cars.* Word class errors are thus intralingual errors, resulting from the complexity of English word classes, about which the participants did not have sufficient knowledge.

5. Prepositions

Table 9

Subtypes of Preposition Errors

Code	Characteristic	Description		Example	Token	Percentage
UnPrep	Addition	Unnecessarily add preposition	(1)	*One reason that cause people leaving their hometown is that they are seeking ***for*** better education. [Essay 2.1]	42	3.5
WPrep	Misuse	Use wrong preposition	(2)	*When I go to the university ***on*** the morning by metro, I always get stuck in lots of crowds. [Essay 15.1]	34	2.84
MPrep	Omission	Omit preposition	(3)	*In urbanization, the hospitals are (^) higher quality. [Essay 8.1]	22	1.83

Three subtypes of preposition errors were found: addition (3.5%), misuse (2.84%), and omission (1.83%) of prepositions. Suvarnamani (2017) also discovered these types of errors, but the participants in her study misused prepositions in the highest frequency, followed by the omission and the addition of prepositions respectively.

Prepositions can cause hardship to L2 learners as it is rather difficult to know which one to use with a certain noun, verb, or adjective (Swan, 2005). The participants in this study were no exception, considering the number of preposition errors they made (see Table 9). In (33), the participant writer was probably familiar with the phrasal verb *look for*, which means the same as the verb *seek*. He or she then used *for* with seek, too, suggesting that some preposition additions might result from this kind of generalization. In (34), the participant writer used the wrong preposition *on* with *the morning*. According to Carter and McCarthy (2006), both *in* and *on* can be used with *the morning*. The difference is that *in the morning* is used to refer to a period of time, while *on the morning of (followed by a particular day or date)* is used to refer to a specific day. This clearly shows that prepositions are not easy to use.

As many L2 learners across diverse backgrounds all share difficulties in using prepositions and occasionally commit preposition errors in their writings (Atmaca, 2016; Phoocharoensil et al., 2016; Promsupa, 2016; Sermsuk et al., 2017; Seyitkuliyev et al., 2020), preposition errors are thus regarded as intralingual errors.

6. Mechanical errors

Table 10

Subtypes of Capitalization and Punctuation Errors

	Code	Characteristic	Description		Example	Token	Percentage
Capitalization (61 tokens, 5.09%)	UnCap	Addition	Unnecessarily add capitalization	(1)	•In short, *Air* pollution problem in Bangkok is a very serious problem and affects everyone in the city. [Essay 6.2]	46	3.84
	MCap	Omission	Omit capitalization	(2)	•Whereas some people think promoting public transporting using such as *mrt*, *bts*, and bus cuts more carbon emission, the apparent advantage is outweighed by the disadvantages. [Essay 25.2]	15	1.25
Punctuation (59 tokens, 4.92%)	MCom	Omission	Omit comma	(3)	•Some group of people believe that famous academies provide better instruction ^ which is true because there are schools for top students to enroll in and these schools provide Better equipment. [Essay 9.1]	42	3.5
	MPeriod	Omission	Omit period	(4)	•However, people migrate from rural areas to urban areas in Thailand for education purposes, job opportunities, and health care ^ [Essay 8.1]	6	0.5
	UnCom	Addition	Unnecessarily add comma	(5)	•However, nowadays, people still migrate to avoid some events namely, famine, and wards. [Essay 9.1]	6	0.5

	WPunc	Misuse	Use wrong punctuation	(6)	•Immigrants come to our country for working*; so,* there are more labours in the labour market which includes high-skilled and unskilled labours. [Essay 6.1]	5	0.42

Interestingly, quite a number of participants unnecessarily capitalized words located in the middle of the sentence as exemplified in (36). Its percentage, 3.84%, was relatively high, even when compared with the wrong use of past simple tense instead of present simple tense (2.92%) or the addition of prepositions (3.5%). Such high frequency was unanticipated, considering the simplicity of this capitalization rule, which is always capitalize the first word in the sentence, and the proficiency level of the participants, which is intermediate or upper-intermediate. However, it is not surprising to discover that quite a lot of commas were omitted (3.5%) as the comma rules are complicated, especially when they are used with conjunctions and in relative clauses as in (38).

Many Thai L2 learners find capitalization and punctuation difficult as they are totally different from their L1. When they write in Thai, neither capitalized words nor punctation marks (e.g. commas, semicolons, or periods) are needed, so they do not have to worry about them. On the other hand, in English, especially in academic writing, these two are necessary in every sentence.

7. Errors at sentence level

Table 11

Subtypes of Fragment, Run-on, and Voice Errors

	Code	Characteristic	Description		Example	Count	Percentage
Fragment (40 tokens, 3.34%)	FragSub	Misuse	Use subordinate fragment instead of complete sentence	(1)	•*Because* people in Bangkok can work throughout the year unlike people who do agriculture. [Essay 17.1]	25	2.09
	FragMSubj	Omission	Omit subject of independent clause	(2)	•In rural areas (^) have less employment and it has a cheaper wage than urban centers. [Essay 25.1]	8	0.67
	FragMV	Omission	Omit verb of independent clause	(3)	•Not only the higher income, but also more opportunities to find a job in Bangkok (^) because there are various types of business in the city that still have spaces of unemployed person. [Essay 9.1]	4	0.33

	FragRel	Misuse	Use relative clause fragment instead of complete sentence	(4)	*According to World Population Review, the capital of Thai has more than 10.6 million people. ***Which*** mean Bangkok has population ten times more than average province's population. [Essay 14.1]	3	0.25
Run-on (17 tokens, 1.42%)	CS	Misuse	Use comma to link two independent clauses	(5)	*However, there are insufficiency equipment in rural areas, diagnosis cannot be correct exactly. [Essay 13.1]	10	0.83
	Fused	Misuse	Use fused sentence instead of complete sentence	(6)	*Another example is the store in urban there are many stores to choose to buy the stuff. [Essay 12.1]	7	0.58
Voice (14 tokens, 1.17%)	WActi/ Passi	Misuse	Use active voice instead of passive voice	(7)	*PM 2.5 which is mentioned widely is the one of the examples air pollution which ***causes*** by incineration. [Essay 29.1]	9	0.75
	WPassi/ Acti	Misuse	Use passive voice instead of active voice	(8)	*However, with cooperation from everyone, the air pollution in Bangkok ***will be disappeared***. [Essay 15.2]	5	0.42

Under the category of errors at sentence level, fragments, as in (42), were the most frequently found, accounting for 2.09% of all the errors committed by the participants. Based on the analysis, fragments in this study were usually made when the participant writer wrote a long dependent clause but forgot to connect it with the other independent clause to form a complex sentence as can be seen in (42).

In the EA literature, relatively low numbers of fragment and run-on errors were also reported in the studies of Promsupa (2016) and Seyitkuliyev et al. (2020). This, however, should be interpreted with caution as the low frequency might not signify that these errors were not serious. According to Byrd and Benson (1994)'s classification of errors, which was the framework of Seyitkuliyev et al.'s (2020) study, fragments and run-ons were among the most serious grammatical problems as they could affect the comprehensibility and interrupt the writing flow. Therefore, although these errors occur less frequently than the others in students' writings, they should not be completely ignored by writing teachers.

CONCLUSION

The present study has provided empirical evidence on the grammatical errors made by Thai EFL students in an EAP writing class. The most frequently found errors were errors at word level, including errors on nouns, articles, verbs, word classes, and prepositions, while mechanical errors and errors at sentence level occurred much less frequently. More in-depth analysis into these errors also showed that the students struggled with the use of singular and plural nouns,

the use of the article *the*, and subject-verb agreements the most. In terms of the causes of the errors, both interlingual errors, resulting from the Thai interference, and intralingual errors, caused by the complexity of the English language itself, were found in this study. They were summarized in Table 12.

Table 12

Sources of Errors

Type or subtype of error	Interlingual	Intralingual
Misuse of singular form instead of plural form	✓	
Misuse of plural form instead of uncountable form		✓
Article errors	✓	
Subject-verb disagreements	✓	
Verb tense errors		✓
Word class errors		✓
Preposition errors		✓

Although the results of this study probably cannot be generalized to all EFL university students across Thailand, they definitely shed light on the grammatical features that this group of students may find most difficult to understand thoroughly and on the grammatical errors they are likely to make most frequently.

Issues

The present study raises three issues that deserve more attention from Thai EFL teachers. Firstly, Thai EFL university students still make grammatical errors that impair the quality of their writing. Although errors like the misuse of singular form instead of plural form, article errors, or subject-verb disagreements might not interfere with the meanings students try to convey, they can undermine the quality of their writing, especially when they appear in large numbers. Teachers as well as readers would agree that even though a piece of writing contains clear, organized ideas and accurate vocabulary, it cannot be regarded as high-quality if it is replete with grammatical errors, as grammatical accuracy is a key element of good writing. To improve students' writing quality, teachers' attempts to keep these grammatical errors at bay or reduce their occurrences are thus crucial.

Secondly, grammatical errors may prevent students from producing publishable work in the future. As previously mentioned in this article, one of the main goals of most universities is to prepare students for their future study. When students pursue higher degrees, they are required to conduct research and publish their work. Therefore, bachelor's degree programs must equip students with the necessary writing skills that will allow them to produce writings that reach publishable standards in the future. The main concern is if students continue to make grammatical errors in their writing, the prospects of them being able to write publishable work will be bleak. To secure a better future, university teachers' determined efforts to assist students in fixing these errors are thus imperative.

Lastly, the results of the present study, to certain extent, demonstrate the failure of English instruction in Thailand. In fact, it is rather astounding to find that the participants in this study still made a large number of noun errors, especially the misuse of singular form instead of plural form, after each of them had received English instruction for at least 13 years. It is even more surprising considering that this EAP writing course was the fourth English course they took at university, and that the university they were attending was one of the leading universities in Thailand. When their backgrounds are taken into account, it seems their deficiency in writing grammatically correct sentences does not result from the lack of English instruction but rather from its ineffectiveness. If over a decade of English instruction cannot enable Thai students to "write accurately in complete sentences with very few minor errors that can be regarded as slips" as specified in the Writing Assessment Rubric (see Appendix), it is difficult to regard it as successful.

Recommendations

To tackle these issues, Thai EFL teachers, especially those teaching EAP writing classes in universities, need to put more efforts into helping their students fix grammatical errors. Based on this study's findings, three recommendations are put forward.

First, to curb the three interlingual errors, namely the misuse of singular form instead of plural form, article errors, and subject verb disagreements (shown in Table 12), mini-lessons on how to use nouns, articles, and subject-verb agreements should be provided in all writing classes. Teachers should explicitly explain important rules of these grammatical features. For instance, a teacher may explain that there are three forms of nouns: singular, plural, and uncountable forms, and that while uncountable and plural nouns can stand alone, a singular noun must be preceded by an article *a, an,* or *the*. Additionally, it should be emphasized that the nouns they use in their writing must always be in one of these forms. In particular, plural forms must be used to indicate plural nouns. After that, the teacher may ask students to write a short paragraph about a particular topic and ask the students to check if all of the nouns they write are in either singular, plural, or uncountable form before submitting the paragraph to the teacher. Peer feedback can also be implemented. The teacher may ask students to swap their paragraphs with their peers and then let the peer check whether all the nouns in the paragraph are used correctly. What teachers need to keep in mind is that errors on nouns, articles, and subject-verb agreements are interlingual errors which occur because of their non-existence in the Thai language. Therefore, to prevent students from making these errors, two things are of critical importance: their knowledge of the grammatical rules that do not exist in their native language and practices that sharpen such knowledge. Teachers should ensure that they provide both to their students.

Second, to aid students in reducing the intralingual errors on the misuse of plural form instead of uncountable form, verb tenses, word classes, and prepositions (see Table 12), teachers should recommend a grammar book, or "a bible" students can rely on when they have problems with verb tenses, and explicitly teach and train them to consult English-English dictionaries when they experience confusion about countable vs. uncountable nouns, word classes, and prepositions. Researchers (Atmaca, 2016; Phoocharoensil et al., 2016; Promsupa, 2016; Sermsuk

et al., 2017; Seyitkuliyev et al., 2020) have agreed that these intralingual errors are attributed to the complexity of the English language. Consequently, it would be impossible to teach all the complex grammatical rules related to them, especially within limited class time. What teachers should do is to give them the tools (i.e. the suggested grammar book and dictionaries) and then help them develop the skills they need in using these tools so that they can effectively use them to prevent or fix these intralingual errors.

Third, teachers should provide students with a checklist that contains a list of grammatical features they need to double check before submitting their work. Based on the most frequently found errors in Table 12, these features include 1) nouns: singular, plural, or uncountable; 2) articles: a, an, the, or no article; 3) subject-verb agreements: singular or plural; 4) verb tenses: present, past, or future; 5) word classes: noun, verbs, adjectives, or adverbs; and 7) prepositions. A grammar checklist is a tool that can raise students' awareness of their grammatical errors. It is also a means to instill the habit of editing one's work before submission, which can empower each student to become a better writer.

All in all, Thai EFL university teachers should devote more attention to the grammatical errors made by their students and take serious actions against them because these errors threaten the quality of their writing. The most important issue that must be addressed is without the continued efforts of both teachers and students, these errors will persist and will in the end obstruct students from producing writing that is of publishable quality.

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Appendix

Writing Assessment Rubric

Band	Task Completion	Organization	Lexical Variety	Structural Variety and Accuracy
2.5	Expresses a clear stance/ main idea. Fully addresses the topic. Provides a thesis statement, topic sentences, supporting sentences, and a conclusion that are all clear and well-developed.	Arranges ideas logically with the use of appropriate transition devices. The essay/paragraph reads smoothly throughout.	Uses a wide range of vocabulary accurately with very few minor errors that can be regarded as slips.	Writes accurately in complete sentences with very few minor errors that can be regarded as slips.
2	Expresses a clear stance/ main idea. Mainly addresses the topic. Provides a thesis statement, topic sentences, supporting sentences, and a conclusion that are generally clear. A few parts of the answers may not be fully covered.	Arranges ideas logically with the use of appropriate transition devices. The essay/paragraph reads generally smoothly although a few parts may catch attention.	Uses a wide range of vocabulary with an acceptable degree of accuracy albeit with occasional minor errors.	Writes in complete sentences with an acceptable degree of accuracy albeit with occasional minor errors.
1.5	Expresses a position/ main idea, but it is unclear. Addresses the topic only partially. The thesis statement, main idea sentences, and supporting sentences are provided but may not be clear.	Arranges ideas logically with little use of transition devices. The essay/paragraph doesn't read smoothly due to the lack of transition devices.	Uses a fair range of vocabulary albeit with frequent major and minor errors.	Write in a limited range of sentence structures, with an acceptable degree of accuracy albeit with occasional major and minor errors.
1	Does not express a position/ main idea. Addresses some minor parts of the topic. The thesis statement, main idea sentences, and supporting sentences are not clear.	Arranges ideas with very little logical connection and no use of transition devices at all.	Uses a limited range of vocabulary with frequent major and minor errors.	Write in a limited range of sentence structures with frequent major and minor errors.
0.5	Does not express a position/ main idea. Does not adequately address any part of the topic.	Shows very little command of essay/paragraph organization.	Writes only a few words.	Writes only memorized phrases.
0	Does not do this part of the test. Shows no identifiable command of English structure and vocabulary. Writes an incomprehensibility/completely unrelated response.			